











BY

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PREFACE

The aim of this book is to put at the disposal of its readers a point of view or method of thinking rather than a completed system of thought. Since this point of view is social, it should be participated in by the pupils as well as understood by the teacher. The question of "methods" as something peculiar to the outfit of the teacher is thus absorbed into the larger and more practical problem of community life.

The stimulus to such thinking comes from the observation of the facts of social life as they occur in the schoolroom or wherever people are being educated. It is interesting to observe that most of the systems of education and their consequent "methods" have had another origin. Herbart's experience as a private tutor, in which capacity he was engaged principally with single pupils, doubtless gave him the important observations of fact which led to his theories. When Rousseau explains what education should be, he takes one pupil and artificially isolates him from the rest of the world. It was difficult for Pestalozzi to see what was actually occurring among the children in his charge, because his own peculiar experience as a child was constantly in the background of his mind and constantly affecting his emotions. Other writers, as Montaigne, Mill, and Herbert Spencer, have in mind to a large extent their own experience as individuals. Their views are thus largely subjective.

The actual facts, however, press upon us the necessity for social observation and explanation. Even approximately scientific results cannot otherwise be obtained. Children in the schools are always in numbers, and classes are never successfully taught as mere collections of separate individuals.

The experiences described in this book are therefore nothing more than cases. They are not ideals and do not call for imitation. Every group for education and coöperation will differ from every other, just as individuals differ and the circumstances in which they find themselves. The point of view or method of thinking is the essential factor which makes for liberty, social cohesion, and thoroughness. These same educational requirements can be realized in entirely different forms.

As suggested above, the experiences described are quite incomplete and fragmentary. Even so, they may be of considerable service to the reader who cares to habituate himself to the social point of view in education. A critical sketch of three famous schools is begun in Chapter III. This is followed by descriptions of school work, which are not meant to represent perfection of either method or attainment, but which, it is believed, succeed in showing some features of the social spirit more completely than do the three examples studied in Chapters III, IV, and V. The two chapters on self-organized group work aim to show the more general features of social organization in the school. The concluding chapters of the book take up some special themes of education and attempt to show to what extent their best teaching depends upon a recognition of social facts.

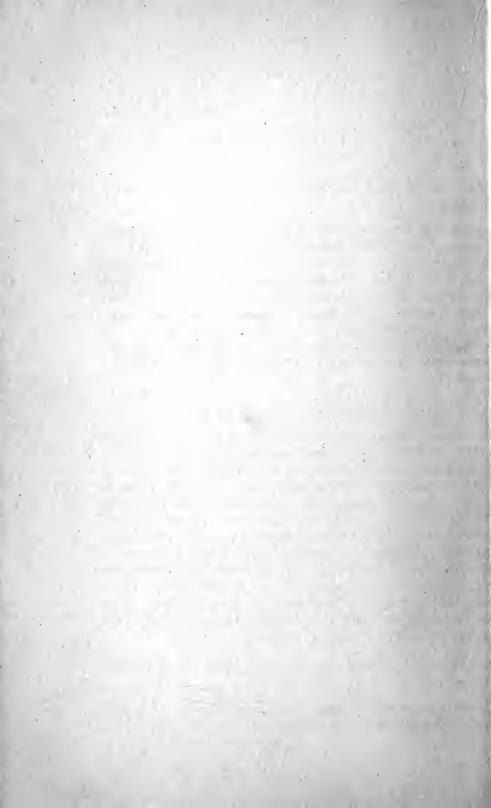
The social education club, the Social Education Quarterly, and the social education congresses held in Boston, have

PREFACE

already awakened considerable interest in the movement they represent, — a movement which it is safe to say is destined to stimulate the deepest, the most progressive, and the most characteristic elements in American education. The state and the school can avoid the evils that threaten them only by a more comprehensive and deeper social synthesis organically united with a freer and more thoroughgoing individual development. The aim of this book will not be realized if it does not add something, however small, to the solution of this problem.

The pleasant duty remains to acknowledge the assistance of many teachers and pupils who have, by their coöperative work and criticisms, made this book possible. It is only because they are now so numerous that special recognition becomes difficult and practically impossible. President G. Stanley Hall, without whose epoch-making work in child study the observations in this book would have been difficult, if not impossible, I desire to express my sincerest admiration. To Professor W. H. Burnham, Professor George H. Locke, Principal Myron T. Pritchard, and to my colleagues, Miss Dora Williams and Miss Katherine Shute, who have read the manuscript, I am deeply indebted for many valuable suggestions. To President Arthur T. Hadley, whose criticism was most profound and far-reaching, I am under a very special obligation. Through the courtesy of the publishers of the Educational Review I have been able to use for a part of Chapter VIII a portion of an article which appeared in that magazine.

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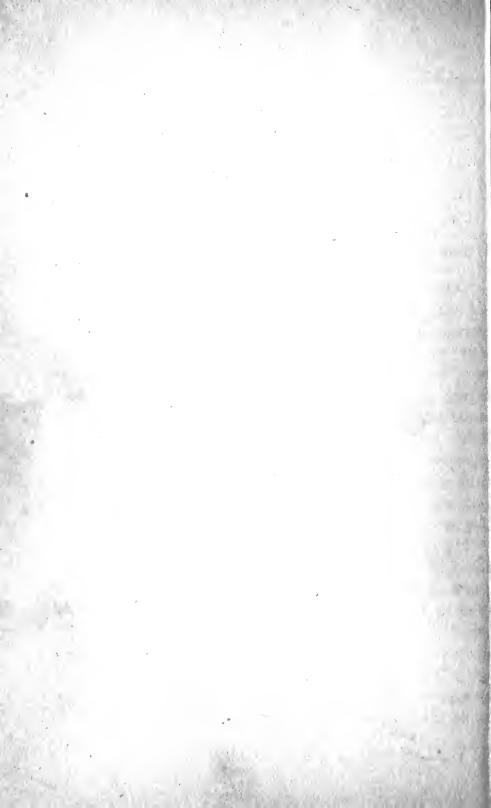
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CHAPTER I

THE SOCIAL RELATIONSHIPS OF THE SCHOOL

Education is a work which is not confined to the schools. It is an undertaking which any individual may engage in to a greater or less extent. Each one has at least himself to educate, and the most of people are interested in trying to effect some beneficial changes in the minds of others. The schools are not the only definite social organization which pretends to educational aims. The church, the state, the club, the meeting, business concerns, and even gatherings for amusement are often consciously educative. Any effort which is designed to conserve values and develop personality makes a contribution to education.

The school as a special organ for education must fit into the rest of society, must supplement it where necessary, and learn from it on every side. It must prepare the children to live the best possible lives both for themselves and others in the world which they are to enter. In order to do this the school must be adapted not only to the present state of society, but it must select the influences received and perpetuate those which are best. It must carefully avoid fitting children for a past or lower order of things. It must indeed do more than this, because society itself is constantly changing. Not only the industrial and business world, but the whole life of to-day is quite different from what it was thirty or even ten years ago. To be really effective the school is forced to idealize the present activities of society, and prepare the young for a future world which exists only in the minds and hearts of the community. The school at its best is a prophecy, as every embryo is a prophecy of a better and nobler life.

To be a true prophecy the school must be itself alive and growing. The ideals of the adult community for the school remain sterile if they are not welcomed and do not enter into the lifeblood not only of the teachers but also of the pupils themselves. More than this, the school itself must make and realize something at least of its own prophecy. In doing so it must necessarily draw support and nourishment from the adult world, and adapt itself to it, but must at the same time be permitted an independence of life and movement which will win the admiration and approval of those who maintain its existence often at a sacrifice to themselves. Individual parents frequently realize this attitude with their several children. The adult community should be able to do as much for the new community which they are sending onward to the unfought battles and the untried tasks of to-morrow.

If there is any measure of truth in the view of the school as an indispensable organ of society, it is quite plain that some preliminary insight into the nature of this society, and some idea of the essential laws of its growth and progress, is absolutely necessary to any one who would wisely help in its evolution. From the mental mechanism

studied by individual psychology enough cannot be deduced. Education can never be a mere matter of applied psychology, if this term be used in the strictest sense. Social relationships must be studied in themselves, and not confined to the nevertheless necessary individual mechanism of mind or brain. It is indeed a question, as Tarde claims, whether even the power to think is not itself a creature of communication, language, and social intercourse.

However this may be, all the important needs and aspirations of man are revealed to him in his association with others. Without his fellow, as Aristotle said, man would be either a god or a brute. Except from a purely physical standpoint, and as representing the unity of cell life, man as an individual is an abstraction. His thoughts and ideas, his ambitions, his hopes and fears, his knowledge and morality, drive him constantly beyond the physical organism. His real self, as every one recognizes, is not merely this physical organism, but includes something spiritual and extra-physiological. What this may be in all its aspects is not our present function to determine, but part, at least, of this reality is social and consists of his relationships to others. The consciousness of what worth a man is to others represents and measures a large part of his true self. Indeed, if we could discover any aspect or portion of ourselves which never came into contact with, and formed no part of, any other being, whether God or man, is there any of us could claim it as his own? Our secret thoughts are no exception: we long to utter them to some one. When we know them, they have already clothed themselves in language of some form, unuttered or expressed. This language is born from our contact

with human beings, and is made for the purpose of communication.

Man, as we know him, is already social. The existence of society, or membership in society, does not depend upon the will of any individual or any number of individuals. Society was not formed by any one's intention. Association itself is the primary fact and dominates and modifies the character of each constituent. Like the copper in bronze or brass, the individual plays his part in the combination. The result may be brass or bronze, depending on the ingredients, although in this case, since it is never separable, we cannot know or rightly imagine what the copper would be by itself.

The truth of this is easily seen if we observe our own feelings and actions in the various groups to which we belong. In the family we are one thing, with a group of friends another, in business relationships still another. Even when we are alone we are nevertheless in society. Our thoughts are still busy with others. If we think of ourselves, it is ourselves in relation to some social group or situation, either imagined or real. Sometimes, indeed, we are never more alone than when in the physical presence of others, and never more in society than when alone.

Society develops by the action of social individuals upon one another, but the effects of this action are, at first, largely unexpected and unforeseen by any individual. An illustration may help to make this plain. The first trail or pathway was worn through the woods, not because any one thought that a pathway would be a good thing. The pathway was the unlooked-for result of the frequent repetition of the same action perhaps for different personal

motives. After the pathway has once appeared it becomes a fact which is not dependent on any one's private volition. It may grow into a well-marked roadway or into a crooked city street. It has its own nature to which individuals who travel on it must conform. It is not simply an effect. It acts as a cause and produces effects in those individuals who are forced to adapt themselves to it. Individuals can use it or modify it only by submitting to its laws.

The application of the illustration is not difficult, since society may conveniently be regarded as a complex of pathways which are worn into the minds and brains of human beings by their mutual interaction. In one form or another these pathways are always there. They are not made primarily by the individual owner of the brain for the accommodation of the public. They are not made primarily by the public for their own accommodation. They are as much objective facts, with a nature of their own to which all who use them must conform, as is the pathway in the woods; so long as people are in contact, which is always, either by word or pen, in imagination or reality, in pleasure or business, these pathways are being used, whether we will or not.

Without doubt the individual whose brain paths are being used socially is conscious of the fact. But he cannot prevent it. It may give him pain; the result may seem useless to him; but his private wishes and private feelings are necessarily borne down by the coercive force of society, as it exists in the structure of his own mind and the action upon it of the minds of others.

\ Of this coercive action of society there is no better example than the establishment of the school. This is not

computains [5] force

an institution which proceeded from individual intention on the part of its members. Children did not invent the school. They may yield to it with a good grace, they may even wish to go; but the school exists and is maintained independently of their attitude on the question. school is primarily an effect of social action on the part of the community. The original cause of the school exists in the thoughts of the adult community. It has become intolerable to society at large to see a child grow up without what are called the rudiments of education. That every child who is capable of it shall learn to read, to write, and to obey is felt to be necessary if he is to be a serviceable member of society. It is not primarily for his own individual good that he is taken from his free and wandering life of play. It is for what society can get out of him, whether of a material or a spiritual kind, that he is sent to school.

In so far as the school responds effectively to the social causes which maintain it, it acts as a cause itself, and produces return effects upon society at large. This is plainly seen in the social effect of the present widespread ability to read and write. As every one knows, without this power modern business and industry would soon be at a standstill. Our post office, our newspapers, our telegraph and cable systems, our railways, function as they do because of this general public capacity developed by the schools. If for no other reason than to maintain itself at its present status, society would be justified in compelling every one capable of it to learn this much. It is, however, to be noticed that when children in any considerable numbers were first sent to school and taught to read, the social results which we have indicated were not thought of. No

one pictured our modern newspapers and our system of advertising, or imagined the spread of our postal service. These are the material expressions of objective social facts, which are largely the unexpected result of the action of the school. This, however, is simply an instance of all social development. The effect always turns out to be a cause itself, which, reacting upon the original cause, reënforces and partly changes it.

Still more fundamental and necessary than the widespread capacity to read and write is the need of social obedience. "It is difficult," says J. S. Mill (1), "to make a free and warlike people submit itself to the yoke of civil government." But where this has been possible, it may be observed, says he, that there have been three conditions fulfilled, - an active principle of cohesion or sympathy among the members of the state, a feeling of allegiance or loyalty, and, most important, "a system of education, beginning with infancy and continued through life, of which, whatever else it might include, one main and incessant ingredient was restraining discipline. . . . The entire civil and military policy of the ancient commonwealths was such a system of training; in modern nations its place has been attempted to be supplied, principally, by religious teaching."

Where, as in America, religious teaching is no longer associated with the state, it becomes all the more necessary that training in discipline should be directly organized by means of schools. If free and warlike people are to be properly tamed, they must be caught while young. And if religion is no longer to be taught, something else must be found to give opportunities for the exercise of submission.

Enough has been said, perhaps, to indicate the seriousness of the problem of discipline in social education. It hardly needs to be dwelt on. The typical schoolmaster is an embodiment of its most obvious and perhaps most superficial demands. He transmits the pressure of the causal forces of society behind him. And having done this much, he often thinks he has done all. But a cause, however great and overwhelming, does nothing without its immediate effect. A hammer falls. If it falls upon a nail, it drives it in. If it falls upon an anvil, it makes a noise. If it falls upon a stick of dynamite, it makes a still greater stir. To confine ourselves to the falling of the hammer, and to neglect its effects, would be dangerous as well as unscientific. The study of the effect and its peculiarities is not to be ignored.

Society establishes the school by the compulsive force of its demands, and it requires of the school that this compulsive force be maintained and reënforced. But the characteristic effects of the action within the school itself are not primarily considered in these demands, and are not known to society as a whole. The operation of events within the school is left largely to the schoolmaster. Society as a whole is only concerned when these effects begin to react as a cause. While society may profitably enough ask the question, To what extent does the discipline of the school produce disciplined, loyal, and cohesive members of society? it is plain that the working problems which this question raises are problems of the school and not of the demands of society. They are the business of education which begins its characteristic work just where the compulsory demands of society leave off.

Not that these educational effects would ever occur but for their controlling causes, but only that when these causes have once passed into the region of the school they must necessarily become modified and transformed. Indeed what we, as citizens of an adult community, feel about these questions is not directly relevant. Such feelings belong to the outside of the school and are but a part of the causes which originate and maintain it. What we feel simply as parents is no more relevant. Children in school, or in association with other children from other families, find themselves in different relationships and act and feel differently from what they do at home. A given act, a word or look, has a different effect upon them from what it has at home. The school is something more than a mere extension of the state or the home. It is a social combination, with social feelings, sentiments, and needs of its own. By constituting it at all, society has constituted it a social organism, certain to produce definite social changes in the brains of its members.

It is perhaps sufficiently evident from these considerations that the schoolmaster should be not merely a member of adult society, capable of transmitting its pressure to the school, but at the same time a specialist in education. He should know intimately the widest range of effects that can be produced in the school. He should realize that these are not effects which he is producing, except as a necessary medium and contributing cause. He should realize that the effects are written in the minds and characters, the actual feelings and spontaneous social actions, of the children themselves.

Nor does he need to wait till the children grow up to study these effects. Not only what they do in school, but

what they do when they leave the schoolroom and are free to organize themselves, will tell the tale. Do they talk of school affairs, and in what way? Do they loaf in parlors or on street corners, and find destructive mischief or idleness more fascinating than anything they have gained in school? If social pathways are being worn into their brains, are these pathways such as the children care to use themselves when they come in contact with their fellows; or do the pathways which are actually used have another origin, and are they of another character than those which the fond ideals of the schoolmaster picture or the interests of society require?

The nature of any combination or association of human beings is, of course, expressed by what the various individuals do and think. The social pathways we have spoken of are in reality alive, and consist of thoughts, feelings, and actions. Sometimes it is practically the same thought that exists in all. A mere crowd may become possessed of a single idea, and may be led to do things in a moment of impulse, which most of its members would afterwards scorn or believe impossible to accomplish. When a given stimulus brings into the focus of consciousness of each individual just the same experience, and when that experience is known to be shared, we have social action of the same unvarying kind, whether we are dealing with a crowd or with a succession of individuals. There is, of course, a tendency for such individuals to get together, to select the stimuli which make them feel alike, and thus to act as a crowd.

This, however, is not the highest or most characteristic form of social action. The focus of consciousness is, after

all, not the whole of it. Although it is intense, it is continually passing from one idea or impulse to another. Better organization means that, even while we are feeling the impulse that is in the focus, we have some consciousness of what is in the margin. To make this marginal consciousness felt, we need the stimulus of other people who have a different point of view, and who may have in their different foci of consciousness aspects of the situation which are not in ours at the time, but which we recognize as capable of being so. People related in this way, as a group, correspond more perfectly to the large and varied relations of the universe in which we live than if they all thought alike.

Interestingly enough, the whole movement of civilization has been a gradual change from the predominance of the first type of organization to the second. The clan, the tribe, the early forms of religion, insisted first of all upon uniformity, and were unable to tolerate much difference of character and opinion. As population increased, however, differentiation necessarily followed; while the division of labor and other functions which this permitted reacted favorably upon the maintenance and further increase of population. Modern states and nations are characterized by the extraordinary variety of individual character and capacity, which they are able not only to tolerate, but to turn to good advantage in maintaining their cohesion and stimulating their growth.

This is evidently a most important fact for the schools if they are to prepare the young for the present highly differentiated state of society. That kind of education which goes no further than to make every pupil as like his neighbor

as possible would not seem to be best fitted to advance the progress of the race.

It is, however, quite natural that the school should begin on this level. Until very recently there was no such thing as public education. The schools of early times ministered to a special class of the community, at least in the sense that those who passed through them formed a special class. The whole differentiated range of social capacity was not represented in these schools. They existed practically for the sake of the learned professions and the leisure class. In such circumstances a considerable degree of uniformity, since it affected but a small minority of the population, had no very serious drawbacks. The rest of the people were educated in other ways, — in the family, and through the trade or occupation to which they belonged.

When schools were made a necessity for all, it was also quite natural that the same kind of education, more or less suited to a small part of the community, should be opened to all alike, regardless of the fact that by so doing the uniformity latent in the class school would be magnified to national proportions, and thus become quite ineffective in training different individuals for their various tasks in life. The unfortunate result has been that the masses of the people have had thrust upon them second-hand schools which were never made to their measure or adapted to meet their needs.

Some consciousness of the deadly uniformity of school training, and its inadequacy to meet the variety of modern conditions, is shown in the increasing public demand for individuality and independence. At first sight the demand for obedience and the demand for individuality run counter

to each other. To the teacher who does not study closely the operation of these contrasting demands in their effects on the social organism of the school itself, they are certain to seem antagonistic. But since the demand for discipline is more ancient, as well as more obvious, while that for independence is of more recent growth and harder to understand, the average teacher does little more than introduce a few variations of his authority, which are supposed to make for independence.

Owing to the pressure of outside social sentiment, independent thinking is usually held up as a great virtue in education, and if such a thing could come by adjuration or command, we should have no lack of it in the school. But what is the actual practice? Work is given out or problems enunciated, and the teacher insists that everything be done independently. To accomplish this, separate desks are used, and if the work is to be done at home, threats, commands, or special honor codes invented by the teacher, but not accepted naturally by the school, are employed to prevent pupils from communicating. When the exercises come in, the results of this "independent thinking" are strangely uniform. This is, of course, the real aim of the procedure, which originated wholly with the teacher.

In the recitation itself the situation is usually the same. Here the pupils frequently raise their hands in order to answer questions, or, rarely, to ask them. But what they say depends upon what the teacher has determined that they shall say, and their minds are mainly occupied in thinking what this may be. Even when the recitation is not a recital of a previously learned lesson, but of the nature of a discussion (so-called), the teacher naturally

"conducts" it, rules out stray remarks, and nods his approval of those answers which he has been "looking for." It is evident that the teacher is practically the cause of all that is happening. No pupil is conscious, except indirectly or surreptitiously, of causing effects in the minds of his classmates. He is not using the social pathways of his fellows, nor are his social powers being used by them. Even when he is "allowed some rope," he is conscious that the rope is always there. However necessary and right such a condition of affairs may be, we need not be under the illusion that it is cultivating independence.

But we are frequently told that in America, at least, we are coming to have too much independence, that liberty has become license, and individuality mere selfish individualism. This is, again, a demand on the part of society which we should do well to heed. Yet we are forced to ask how it is possible that the school, which is so filled with compulsory demands that even its attempts at independence turn out illusory, can ever be held accountable for the smallest share in this increase of individualism?

The answer to this is plain. If the school fails to develop a true individuality, a false independence will be likely to take its place. If pupils are brought up in external compulsion, the responsibilities of freedom will be unfamiliar to them. If they have no practice in making and using social pathways in the brains of their fellow pupils, adapted to the work of scholarship, culture, and worthy production of whatever kind, when they leave the school and are free from its coercion they naturally seek those pathways which they know and which they have been instrumental in creating. When a pupil leaves the

school we do not find him seeking social groups which organize themselves as the school is usually organized. We do not find people in offices and parlors getting up and asking questions to which every one knows the answer, or is expected to feel disgraced if he does not. The individual who should become seriously enamored of the ordinary school practice would find little room for himself in the world of real life. The particular things that are done in school do not cultivate even a working majority of the habits of action which are used in the world at large. This is not because the habits of action of the school are superior to those of the world, but simply because they are narrower, and better suited as a preparation to the life of a primitive clan than to that of a highly differentiated society. They are the result of the pressure of the causal forces of society, passed on by the teacher without consideration of the actual effects which are being created in the social organism of the school itself.

In real life, on the contrary, society at its best organizes itself in groups in which each individual in the various groups to which he may belong, finds himself in contact with others whose weaknesses he supplements or whose greater powers he depends upon. The idea of such a group as a whole is not necessarily contained in the brain of any single member, and as the idea develops by social interpenetration, it becomes, in all its many-sidedness, too large for any member to contain. The function that each plays is a different one, and the thought of each concerning the group is likewise different. And yet such groups tend to stick together. They exercise some form of moral constraint or attraction upon their constituents, who yield them an

obedience sufficient to maintain their cohesion for years, and sometimes for generations. If the school is to prepare for society as it is, it would be natural to expect that some such form of social activity, however embryonic, should be found as a necessary feature of its life.

, This, however, is a feature of organization that cannot come from the direct impact of outside pressure. Neither society as a whole, nor its personification in the teacher, can say: Go to; let there be groups. Let us put so many in one group and so many in another. Let us select individuals according to their capacities, and give them work that will be suited to their needs. No, a real social group cannot be reduced to a mere instrument of the teacher, a means or a method for accomplishing certain preconceived purposes. It is necessarily too many-sided for that. Nor can the constraint required and the obedience developed originate from the outside of the group. It must be a part of its own specific constitution and necessary to its maintenance. The group must be capable of going to pieces, a thing it cannot do if it is to depend on the authoritative backing or the constraint of the teacher. Indeed, it is only when it can go to pieces that there is any reality in the effort to hold it together. It is only then that there is any true loyalty developed. It is only then that its members feel the characteristic group restraint, and submit their private wills for the good of the whole. True responsibility, and even obedience of the highest type, is felt only when the group as a whole is free.

Such conditions of responsibility and group freedom must obtain wherever individuals are members of any group, whether in society or the school. But in so far as

they are also members of the state, they owe a still greater loyalty and obedience to the sovereign group or institution which makes all the others possible. They should do nothing, as members of a group, which is foreign to the real purpose of the state, and the state must necessarily be able to check by force any attempt which would militate against it. The state must be held together, whether subordinate groups are so or not.

It is plain, however, that in present modern society this does not turn subordinate groups into mere agencies of the state. Such a kind of socialism is nowhere as yet a realized fact. At present, on the contrary, self-organized groups for business, for pleasure, for culture of various kinds, still maintain their freedom within the state. They are protected by it whenever force is necessary, and are sometimes aided and encouraged. The state, in fact, as sovereign and compulsory force of society, exists largely for this purpose. Indeed the assumption back of any state is always that social forces are already at work, and go on continuously without compulsory force or legal coercion. As every one knows, when widespread social sentiment is not behind the restrictions or commands of the state, action on its part soon becomes impossible.

The modern state is thus nothing more than a kind of forcible reminder of what is latent in other and smaller groups. In such circumstances, however, the focus of social consciousness tends to appear within the subordinate groups. The vital activities of society are carried out by them. The experiments which are necessary, and the risks which these entail, are naturally undertaken by such smaller groups which, it is obvious, can better afford to

go to pieces. Meanwhile the larger needs, representing the total action of all the citizens, and often remaining in the margin of the social consciousness of the smaller groups, are always embodied in the state. As the reader sees, this makes of the state not so much an initiator as an active balancer of social forces already in existence, a conception quite different from that of *laissez faire*.

We have already pointed out the fact that compulsory social action is demanded in the establishment of the school. As an organized whole, society gives the children a compulsory reminder of what is really latent in them. It insists that they shall grow up neither ignorant nor rebellious. Such educated loyalty, however, is just the thing which, when they do grow up, they realize as most harmonious with their plans. If it were not so, there would be no justice in the demand. Force is used, but as soon as it is used the attempt must be made to show that it is justified, that it has led to a larger liberty than was formerly enjoyed. This attempt, indeed, sums up the whole of education. We may stop a crowd by force from traveling on a dangerous highway, but, having done so, we must justify the action by showing them or educating them to see that it is dangerous. By such a procedure it is felt that force has been in reality but a reminder of their own larger plans and true interests, -- something which has brought into the focus of consciousness that which was already in the margin (2).

But in the matter of the education of the young, when are they capable of appreciating this larger liberty? Must they wait until their majority, and have it burst upon them like an electric flash? Or are they able to realize some of it from the very beginning? If this is possible, it is plain that we cannot accept a mere theoretic acquiescence—a lip service—superficially copied from others, and not capable of controlling action as a self-sustaining motive. Liberty can only be realized by conduct, and its expression is always self-direction, self-organization, and self-control. As an outcome of this, it will mean for each, if it means anything, the carrying out of plans which run beyond the individual, and which will affect other individuals in a similar state of mind, and with whom he can unite in a social group. It is only in such conditions that the individual can be free. There is no liberty in merely being quiet, in doing nothing that may involve, challenge, or interest others. Individual self-control must have a social motive. It cannot be merely negative.

The negative view of liberty and independence is, however, just the one which teachers are too prone to take. In this attitude they are at one with a considerable portion of the thinking public. Ever since the revolutions of a century ago there has been a marked tendency to regard the rights of the individual as separate rights, and to claim that an individual may do what he pleases so long as he does not interfere with others. The demand is an impossible one, and even if a person could withdraw from every contact that might disturb another, his very isolation would be in itself an offense to society as a whole. The real meaning of the demand in practical affairs is social, - that is, it is always a question of the kind of interference; and this is measured by the interests of the social group to which the individual belongs. It is the judgment of the social mind, not of one individual or of a number of individuals as such, which determines whether any given action is an interference or not. There is no "good" action which does not interfere with the immediate focalized plans of some one, and often with those of a considerable number, if progress be rapid.

There are, of course, few teachers who do not try to make the individual pupil feel responsibility. But they work with him as an individual. At least, this is what they think they do. Yet an individual can no more feel responsibility without some social motive than a fish can breathe without water. In a school run on separatist principles the children are like fish out of their natural environment. Morally and socially they lie panting on the bank. But the teacher who works with them at least brings them one point of social contact, namely, himself. Like water in a sponge applied to the gills of fish, this contact doubtless succeeds in preventing complete dissolution.

Not that the teacher's contact is ever to be ignored. Sometimes, indeed, instead of a sponge a teacher is an open hydrant, pouring forth wastefully what ought to be stimulating and life-giving contact with society, both of the present and of the past. The fact remains, however, that usually the contact is unnecessarily narrow. Ask the average teacher who inculcates responsibility, "To whom do you make the children responsible?" The most spontaneous and general answer is, "Why, of course, to me." Sometimes, however, reflection dictates the answer, "To themselves," not meaning by this anything social, but "each to himself"—to his own conscience as an individual. There is a truth in this latter answer, but only when its meaning is social. Practically, responsibility to

self tends to break down in the schoolroom; and the real source of the feeling of responsibility on the part of the pupil is to be found in his personal relation to the teacher, the demands and wishes of his parents, or, in some rare cases, the future, hoped-for career, with its contacts with the wide social life of maturity, which some children are capable of feeling at a fairly early age.

Meanwhile, in all these cases there is caused a serious neglect of the immediate brotherhood of his companions, necessary for all mutual upbuilding in the essentially social and spontaneous work of education. The here and now of real help and service is sacrificed to a beyond, which, even when it becomes an active force, does so with less strength and vitality than it might naturally possess. If children are to be trained socially, they must feel the full effects of social causes, — not merely of society at large, but especially those of the embryonic society of child life to which they belong. They must study these effects practically, and must see to what extent, as social beings, they are real causes themselves. It is on a basis of experience of this kind that they can best interpret the larger and more complex life of adult society and the state.

If liberty and obedience, characteristic of smaller groups and of a vital and focalized social character, are a possible combination for the young, there is no reason why it should be left out of the school, although this institution, even when of a private character, primarily represents the state. Social groups of adults in society at large are always in contact with the state, but in such a way as not to prevent their real freedom. In the school the teacher represents the state as well as society at large. If children's groups

are left, without definite recognition by the school, to be formed on the street or playground, they are left without proper protection and hindered in their normal growth. As a consequence they tend to relapse into organizations for mere play. And even play is not sufficiently protected. It is cut short on every side. Fifteen minutes here and half an hour there is not continuous enough for the carrying out of the best plans of which even play groups are capable. Lack of facilities, especially in cities, hampers their best development. The haphazard contact with the state through the policeman, or other members of adult society, tends to make such activities as may be undertaken haphazard themselves, and deficient in true social significance. That contact with the state, which the state has itself devised as being suitable for children, namely, the contact with an intelligent, learned, socially minded, and sympathetic teacher, would appear to be the only condition in which such groups could find the aid and the protection which they need. It is only under this condition that we may expect them to go further than play and to undertake real and serious work.

REFERENCES

1. J. S. Mill, System of Logic, Vol. II, pp. 519 ff.

2. Compare with Bosanquet's view of society in The Philosophical Theory of the State.

CHAPTER II

TESTS FOR THE SCHOOL

If the school is to be judged by its success in giving satisfaction to present society, and in providing for the development of future citizens, it is necessary that there should be some measurement of its efforts in these directions. Indications of this need are already seen on every hand, but much remains to be done to render the tests proposed suitable, as well as scientific and exact.

The demand, for example, is reasonably enough made that pupils, when they leave the school, should be able to use the best advantages of the life of the community. They should have a taste for reading, and know their way about in a library. They should appreciate art, and have an intelligent interest in exhibitions and museums. They should understand music, and cooperate in extending its wholesome influence. The charitable, social, and ethical activities of the church should be better grasped by them because of their school experience. The newspaper should be read more discriminatingly, and business life be guided by habits previously acquired. No doubt with some pupils, many of these results are obtained under the guidance of a good teacher. But for the most part, the school as an institution has not provided the special arrangements which could secure the best results in these directions. It is felt that there is a gap between the school and life. No doubt the pupils are often told that this higher effectiveness in life is what they should look forward to. But there is lack of opportunity in the school for the immediate practice of this excellent precept. When the pupil leaves the school his reading is no longer done at the dictation of an authority who sees to it that a certain amount of work is covered. No one insists that he go to an art gallery and give a report of what he sees. His higher ethical life in the community will largely depend upon his own initiative and upon the companions with whom he voluntarily chooses to associate. His business life will be compelled only on its lower lines. His own ambitions, his own honor, his own power to plan in a social and nonselfish way, will yield the best of what he is worth to the world, and even to himself.

The school arranges dictated courses of study, whether elective or not, and proceeds to carry them out in the hope of preparing the pupils for life. Its greatest failure is its failure to test its product. The product of the work of the school is evidently not a given amount of knowledge, or skill, or mere mental power. It is not even character, interpreted in the usual Puritan sense. It can be nothing less than a capacity for effective social service, including here as an essential the completest possible development of personality. When a nurseryman cultivates seedlings for the market, it is not sufficient that he plows and harrows, and plants his seeds. He must do more than cast his bread upon the waters, hoping in some vague way that it will return to him after many days. On the contrary, he tests his product at every step. Before he sends his growing trees to distant orchards, he must see that they are already doing the very things that they should continue

to do when transplanted. Upon this basis alone is he secure in the faith that when the time comes they may do more.

If the capacity for effective social service of a selforganized and voluntary character is the highest aim of the school, and one that includes and controls all the others, distinct opportunity for such work ought to be provided in the school itself. When this is done such work will measure the rest of the work that is undertaken. It will be known to what extent the pupils have actually gained by their dictated courses of study if they apply the results of these to social needs, or if, in attempting to carry out their own social projects, they revert voluntarily to the classic themes of education. If pupils spontaneously organize themselves for the purpose of studying certain aspects of nature, to that extent the dictated nature study is justified. If they carry out, by their own efforts and the help which they solicit from others, an historical inquiry in which they become interested, or an arithmetical calculation based on their own wonder or others' needs, or write and act a drama representing their own ideals of life, the way in which they do these things, and the ideas which govern them, will show whether they have been fructified by the dictated courses of study or left untouched by them. When one lights a fire it ought to keep on burning without a constant application of matches or too much work with the bellows. The result of education should be a self-feeding fire. The only way to test it is for the teacher not to hope, but actually to see whether or not it will burn alone.

Certain parts of the school system, particularly the special and private schools, the trade schools, some manual training schools, and professional schools generally, are not

without rough means of testing their work. Professional and trade schools are tested by the immediate success of their graduates. The school of engineering, for instance, cannot afford to recommend incompetents. Its growth and maintenance depend on the reputation of those it sends out. These results are attained both by selection and by a watchful adaptation to the needs of the public. Many private schools are constantly tested by the parents who pay the bills. It is true that a test from this quarter is not always of a highly educational or social character. Either narrow self-interest or society in the special sense of the word frequently dominates. The deportment and manners of the children are often of the first consideration. requirements, tending often to be ornamental, such as music or French, follow next. Deep scholarship, high ethical aims, or wide social sympathy are frequently neglected. Within the circle of the demands actually made, the contact of fellow-pupils, and this of a superficial and conventional kind, usually counts for more than the personality or ability of the teacher. Inadequate as these tests are as regards true usefulness, they serve the purpose of those who make them.

It is the public school, devoted to general culture, from the primary grades up to the college and university, that suffers most from the failure to test its work. Public schools ought to be the best schools. In them should be realized the highest educational ideals of the nation. Special schools may be roughly and imperfectly tested by the success of individuals after they leave the school. This is more difficult with the American public school, which was not organized to fit the special interests of

individuals but to serve the community as a whole. Most American communities insist upon compulsory schooling for all children until they are fourteen years old. Selection of pupils who enter, with a view to improving the output, is thus not possible below this age. Every one must be permitted to come. Indeed, the most backward and recalcitrant are, from some standpoints, deserving of the greatest degree of attention. The cultivation of the best that is in each child is the task of the people's school.

That the schools are largely unmeasured and untested in an objective manner in harmony with their best aims, leads to attempts to measure them by some lower standard. We have already had some experience, in England more particularly, of "payment by results." This has been carried out by means of examinations. When the school is supported financially in proportion to the number of pupils who take scholarships, or to the number who pass examinations set by outside authorities, the efforts of the school are focused on the acquiring of knowledge for a given examination. Teachers study the examiners' idiosyncrasies, and cram their students to get the results required.

But it is not only in England, or where financial payment by results occurs, that similar practices obtain. In Massachusetts and in the state normal schools, supposed by the public to be dedicated to the study of the best in education, a clever teacher has discovered a way to outwit the examiners for the benefit of his pupils. He gives his class a set of answers to learn, whether they understand them fully or not. He then proceeds to teach them the subject to the best of his ability. When the examiner is more *exigeant*, or the teacher less bold and clever, a

vicious selection often occurs, in which not the most thoughtful and original, but the most malleable and retentive minds receive the maximum effort. Even at the best, a given quantity of knowledge is not a sufficient test of a student's education.

In view of the manifest difficulty of testing a teacher's work, a demand is sometimes made to approximate the general culture schools to the type of special schools where the work done is more easily measured. Where we have manual training and industrial work in the schools, the growing skill of the pupils can be readily demonstrated. In so far as these occupations prepare for the special life work which the pupil is to undertake, their effectiveness is directly tested in the market. The children, moreover, like such work, largely because they see results themselves and are interested in the output. As incidental to work of this kind, a considerable amount of the standard requirements of the school can very profitably be acquired. Certain kinds of arithmetic and drawing are necessary in making and executing working drawings. Reading and writing can be brought in by means of descriptions, directions, or recipes. Geography may be touched upon and made interesting in connection with the material which is handled or the object manufactured.

We have here the good old law of correlation, useful enough in its place. The idea is that if a child is primarily interested in doing something, all kinds of related interests can be loaded on. No doubt when a new requirement of knowledge or a new effort appears that seems to the child absolutely necessary to the accomplishment of what he wants to do, he may have native energy enough to

overcome the resistance. But he may, on the contrary, feel like giving up his first desire. At least, he may simplify it considerably so that it takes in far less than the teacher, with his cargo of interests ready to load, had fondly hoped. When the secondary interests are not absolutely necessary as means, although they are ever so logically connected from the point of view of the teacher, is it not the most practical child, rather than the least, who betrays a disinclination to depart from the immediate aim in view, or, after its satisfactory accomplishment, to tack on other efforts as a decoration? Logic consists in sticking to the point. There is, after all, an irreducible surd in the doctrine of correlation, if it be carried very far and measured by the natural interests of the child. It is unpractical to run the whole school on this plan. If the compulsion of the teacher is required to keep the process of expansion going, it is hard to see why he might not just as well have gone after his problem more directly.

The doctrine of correlation and the logical expansion of interests suffers from the fact that the thinking that is done under these titles too frequently refers to interests looked upon as existing within an individual child. In order to develop these interests, the better furnished mind of the teacher is taken as the standard, and the child's interests are not to be "indulged," but "directed" towards this previously assimilated content (1). There is, however, nothing new here, and although legitimate as a factor, it is unnecessarily narrow. It is, moreover, exposed to the danger already mentioned, that when the teacher's direction is removed the interests may revert to simple indulgence, and development be curtailed. If, on the contrary,

interests are to get the trick of self-development, something must be found in these interests themselves which leads to their expansion.

But interests are, as a matter of fact, really expanded by numerous contacts with various minds, particularly with those on similar levels. Something, of course, should come from the teacher. But the total contact of the child's mind with his social environment, both within and without the school, is surely a more natural and broader source of "direction" than the confines of any single mind. The teacher should know how to organize the school socially, so that stimulating influences flow from one pupil to another, and from the school to the community as well as from the community to the school. A feeling of greater voluntary social service should arise in the pupil's mind when he expands his interests. This is indeed the greatest, if not the only effective motive capable of leading him to enlarge his efforts.

When this expansion comes there is no reason why the child should not feel that he is "indulging" his interest. It is, of course, a changed and developed interest, but just for that reason it is felt to be more worthy of being realized. When interests are "directed" by the teacher, is it supposed that the pupil does not discover the fact? Is it as easy as Rousseau thought to "dupe the child"? Close observation seems to show that the child realizes the fact of outside direction very quickly, although he may not formulate it very clearly. Moreover, if he is a good child, he feels that in some way he is rendering a social service to the teacher in acceding to the various "directions" of what are supposed to be his interests. How

often in schools have we seen children acting particularly well when they felt the teacher's professional reputation was at stake!

But if the child be at all clever, he soon sees that he is not performing any intrinsic social service for the teacher. He sees, for example, that the teacher already knows the answers to the questions which he asks the children. In fact, the teacher tells him that the recitations are for the pupils' good, and not for the teacher's. What feeling of social serviceableness can there be in this, and is it likely that such activities will be continued when the conventional atmosphere of the school is removed?

Without denying the great importance of manual training and industrial work, it must be said that these, as well as other single subjects, are not adequate as a center for more than a limited number of the interests of the school. While the outside measurement of the work of the school is easy so far as these subjects themselves are concerned, they do not cover some of the most important social demands of the present day. Primitive people may have advanced in civilization by means of industrial inventions, but these were not the only factors of importance in their social development. Greater affection, fewer superstitions, purer religion and politics, are causes as well as effects of industrial progress. Only a limited portion of the total social serviceableness which we have a right to expect of a well-equipped individual can be extracted from, or closely and spontaneously correlated with, manual training and industrial occupations.

In the kindergarten and primary grades the lack of adequate and natural measurement does not seem at first

sight so important. These schools are often partly free from the demands imposed upon them from without or by the higher grades. To waste time wisely is sometimes taken as their motto, though the measure of the wisdom may seem hard to find. These schools lie near the home, and it is not infrequently sought to make their methods and atmosphere approximate what is supposed to obtain there. This analogy seems rather superficial. The school can never successfully imitate the home. The contact of persons in the school is of a different kind. The school should do more in some directions than any home could ever do, while it certainly does less in others. Such an analogy, however, probably stands for little more than the feeling that the children in the primary school should be happy, whatever else. This is certainly sound, but there are many ways of being happy, some of which are more educative than others. The test applied to the primary schools by public or teachers ought in some way to reveal the social serviceableness for which the children are being educated.

The failure of proper objective tests for the work of the kindergarten has recently led to some rather violent criticisms. It has been said that the kindergarten produces moral and intellectual flabbiness, and that, marvelous to say, these effects are so lasting as to be traced all the way to the university. How the origin of this flabbiness is established we are not informed, and no statistical inquiry is attempted. Mere opinions as they are, however, these criticisms are met by little more than other opinions of an opposite kind. Just what the kindergarten does succeed in doing is left obscure.

The ideals of the kindergarten, as held by the teachers of that department, are without doubt of a noble social character; but how about the ideals and social purposes of the kindergarten as held by the little tots themselves? Are they too young to have any social purposes, however simple? The circle and the group are the two social institutions of the kindergarten, more fundamental to its constitution than the gifts, the games, or the songs. It is to be presumed that the circle and the group are significant because they are fitted to a stage of childish growth where mass movements and tribal instincts dominate, and that they succeed in transforming these instincts into something more suitable for a higher stage of society. The circle particularly reminds one of the celebrations of primitive people, - dances where every foot must strike the ground at the same moment, songs in which every one must join, and even dramatizations applied to useful work, where the whole tribe performs the same action at the same time. Bücher (2) for example, describes a Madagascar tribe, while planting corn, as beginning at one end of the field and moving down its length to the beat of a drum, each member scratching a hole with one foot, dropping in the corn, and covering it with the other. The law of the circle, like that of the early tribe, would seem to be one of strict obedience and social uniformity, although the cohesion involved is produced rather by the authority of the teacher than by the compulsion of the circle as a whole. That this appeals to the instincts of children there can be no doubt.

The kindergarten group, it would appear, represents a step towards social differentiation, and the opportunity for social initiative and responsibility. The question arises,

however, To what extent has the practice of the modern American kindergarten actually recognized this? In many instances, at least, it seems to have continued in the group the same authority and leadership of the teacher which is found in the circle.

It may be that the difficulty arises from the fact that the kindergarten ideas, as they existed in Froebel's mind, originated from his experiences with children of greater age than those which the American kindergarten is forced to receive. Froebel, at least, seems to have had in mind the natural, self-formed groups of children from seven to eight. In "The Education of Man," he describes boys of this age building with blocks, sand, sawdust, fine green moss, etc. They construct a chapel with a cross and altar, a castle with a green hill, and a village. Down by the brook they build "canals and sluices, bridges and seaports, dams and mills." Vessels are made. The various groups come into contact with each other. Treaties arise. "All virtues proceed from this," says Froebel.

How far the modern idea of the group has departed from this may be shown by the editorial remarks in the very edition of Froebel from which the above has been selected. Here a group is represented as constructing a small village out of the fifth and sixth gifts, all uniting "to express what they know about the history of wheat." This modern kindergarten leader then goes on to show the value of a table for such work: "so that with any given material at respectively equal distances from the circle or margin, the work will be strictly symmetrical and definitely related to the sides and angles, diagonals and diameters of the table top." "This symmetrical arrangement," he says, "serves

as a powerful connecting link among the individual workers. They soon learn to contribute their material and energy to the execution of social purposes, with little or no thought of individual gain, and with still less of individual supremacy."

But was there ever formed any real human group, since the days of the matriarchate, without some notion of individual supremacy? The tribes soon developed a leader, and the state grew as leaders increased. This means sacrifice, but such sacrifice is gain and produces supremacy. This is true so long as the gain is real and the supremacy real in the sense of accomplishing results.

The real center of group formation lies in the understanding of leadership. This is very different in children from what is found in adults. It is probably less permanent and responds to different needs. Whatever it is, however, such leadership will take account of the actual personnel and size of the group, and of the actual situation, material and social, in which the children imagine themselves to be, as well as of their aims, purposes, and ideals. Boys do not keep together at the brookside nor form treaties without such leadership.

But if the groups are not capable of being used socially by children so young, at least the institution of free playtime in the kindergarten might have been used as a test of leadership and a revelation of what the children are capable of doing through self-sustained social motives; and to some extent and with some teachers it is so used. But even when free play is not looked upon with indifference or hostility, or excluded altogether, insufficient care is taken to find out what the children are capable of planning for this period. "You may play any game you like, or you may have any gift you wish," rather limits the possibilities. The desire to do ought often to spring from home experiences or from the games and plays of the streets. As it is, there is little organization in the free playtime. It has the merits of a relaxation, rather than a wished-for opportunity for ambition and personal or social desire.

It would be foolish to suppose that any high degree of social serviceableness can be expected of children so young. If, however, their plays and activities ought not to be largely social, but of a biological, hereditary, and racial character, it is strange that we find in the kindergarten a philosophy more saturated with social ideals than anything that is to be found higher up in the school. It is a condition that gives rise to a suspicion that the work of the kindergarten, in the minds of the children themselves, is not to be tested by, and does not flow from, the ideas which are said to govern it, -- that the kindergarten philosophy is not an explanation of things that actually happen among the children, but that it is a product of the ideals and aspirations of the developed adult mind. No doubt the adult mind reveals a part of what lies latent in the child. We may, as adults, see the germ of higher social organization in children's plays, but the germ is not the tree, and we need some means of testing germs. The laws of the germ are its own laws, and to impose upon it standards derived from a later stage is to destroy the possibilities of its growth, while to be unable to apply any standard whatever is to work in the dark with prejudice or sentiment for a guide.

While the standards employed are inadequate, there is, however, no reason why the school should not continue to

profit by the various tests, insufficient as they are, by which the community has attempted to measure its work. Some of these too might be made more scientific, as Dr. J. M. Rice proposes. Knowledge is certainly to be desired, if it is not made the controlling aim. Happiness should come as a result of every good effort. To be equipped to earn one's daily bread is necessary as a foundation for every overtone of culture. In order to make our educational system more social, we need a greater number and variety of special trade schools, as well as a preliminary training in such subjects as will lead up to them. But the school devoted principally to general culture cannot afford to be measured entirely by these demands. The work of a school needs a test, not remote and future, not extraneous to its largest aims, but one that can be immediately and constantly used, that can be easily understood, that is as simple as possible, and that will be welcomed and enjoyed by both teachers and pupils.

Not long ago, during the holidays, I asked a typical first-year high-school girl whom I knew very well, and who had done well in her classes, whether she thought or talked about anything that she had formerly done in school now that she was free to do as she wished, or whether she now used any of the interests which she might have been supposed to have acquired. She told me that she never thought of her Latin or algebra for a moment, but that she had liked "Marmion" when she read it in school. I asked her if she wished to read anything more of the same kind, and suggested "The Lady of the Lake." "Oh," she said, "I don't want to read anything of that sort; I don't like poetry, anyway." She was, however, reading a novel of Dickens's.

She had formerly read another novel by the same author at her mother's suggestion, and liked it so much that she wished to read a second. She said, too, that if she were not going back to school in the autumn, she should like to go on with her French. I asked her why, and she replied that she should like to be able to speak French if she ever traveled abroad. As her sister was just about to spend a year in France, the practical aspect of this appealed to her. The same girl was popular with her school companions, had joined a little club with them, and was naturally active in a social way.

These replies seem to indicate just a natural, healthyminded girl. No one could wish that she continue her high-school grind during the holidays. Nor ought it to be said that her work in Latin and algebra was entirely useless. She had doubtless learned the very important lesson, that a daily task, when set by others, had to be attended to whether it was agreeable or not. Her language showed only ordinary culture, reflecting apparently her home environment rather than the accuracies or subtleties that might be supposed to come from translating Latin and French. Others, at least, taking the same course, varied widely from her in this respect, —a fact also probably connected with their home environments. Her reasoning power in ordinary affairs revealed no traceable impress of her work in algebra. A great part of what she had been doing showed no perceptible results in her development. Perhaps some teachers would say it was capitalized for a college course, and not yet able to pay dividends.

The question is not at all whether such a course is valueless. The Greek triremes or the barques of Columbus were

of indispensable value, but they do not measure up with an Atlantic liner. That a given course of study is better than some others, or better than none, is saying very little for it. Columbus might have said as much for his ships. The Atlantic liner in education has not yet been invented, but is this not largely because we do not realize sufficiently the nature of the task we intend to accomplish? We fail to test our efforts objectively, especially along the lines where we should well be justified in expecting the greatest progress. If increased social serviceableness and the highest development of personality are our aims, we need, as teachers and as citizens responsible for education, not only the best obtainable knowledge of the nature of these aims, but some objective test of the results of our efforts in these directions.

The value of such a test, moreover, is to be estimated not only from the standpoint of better work in the school and better understanding of it by the pupils at large, but by the beneficial effect it would undoubtedly have upon the standing and organization of the teaching profession. This suffers at present both from the large number of poor teachers it contains and from their isolation and lack of coöperation. In many branches, indeed, it is a question whether we should not speak of the teaching trade rather than of the teaching profession. Both incomes and social consideration are reduced to the lowest terms. Many tradeswomen, to say nothing of tradesmen, are paid more and perhaps are equally honored in the community. In Boston, for example, a moderately competent dressmaker receives \$3 or more per day (about \$900 per year), and may rise to well-paid business positions or succeed in obtaining an establishment of her own.

One of the chief marks of a profession is that it controls its own work. Teachers, however, frequently seem content to have their work laid out for them. This is nominally done by school boards, but practically by a superior class of teachers, who often are proud to be called by some other name. The course of study crystallizes the directions of this superior class and makes it possible for them to see that the pupils have a certain amount of instruction, even if they are not really educated.

Sometimes, it must be admitted, a clever teacher can "get round" the principal or supervisor sufficiently to be permitted to do the things that she judges best in her own class room. It is a permission, however, and not a right. On the other hand, the best principals and supervisors are without doubt looking for original, progressive teachers, and are glad to give them the necessary permission; but, unfortunately, both teachers and principals of this kind are exceptional. The average teacher meanwhile feels nothing unnatural in her rôle of unreflecting docility. Indeed, she seems to yearn for it. She "works" so many hours a day, and only wonders why some one who does no more "work" a day than she, often gets a higher wage.

It does not follow, however, that a teacher who is not docile is independently or coöperatively responsible or original. It is quite possible that, like the poorly trained mechanic, she can be relied on only up to a certain point. The principal or superior is then forced to direct nothing beyond what she is capable of executing, — a position something like that of the old woman, who, having in vain commanded her dog to come out from under the bed, was at last forced to say, "I will be obeyed at any rate; so stay

there and don't dare to come out." After some experiences of this kind, the principal or supervisor is loath to overstep the bounds set for him by the docility of his teachers, is suspicious of originality, becomes fonder of platitudes and more disinclined to take risks, but succeeds in holding his job. If his soul could be freed from the slow and icy flow of docility that overwhelms it, the scratches and sheep-backed hummocks of a true glaciation would doubtless be revealed.

So long as teaching is trade-like, centralization, overemphasized authority, and standardized courses of study, although varying with every town and city, will be found necessary, however inadequate they may be. As soon as teaching becomes a profession all the way down, these features will drop away, and a more social relationship, where the rights of the individual teacher are properly safeguarded, will surely supervene. This is a condition that can never come until teachers look beyond their daily or even yearly "work"; until they see more clearly the social ideals for which education is striving; until they grasp the essentials of the social environment in which they are living; until they coöperate freely and steadily with one another; and until they are competent to experiment with and actually create and control a large portion of their own professional activities.

Such experimenting and such creating, however, is impossible without measurement, and it must be a measurement not of mere knowledge, but of social capacity and productive powers. It must, above all, be so objective as to leave no doubt in the mind of even the average citizen, that the same self-organizing ability that is manifested in

school will be amply sustained in later life. As already suggested, this test can be found only in the extent to which pupils, when freed from the oversight and benevolent coercion of the teacher, can use the knowledge and carry out the habits and ideals which it is the aim of the school to foster and protect. But this is a test which ought not to be left out of the school itself. It should be an intimate and organic portion of every school, and the results of it should react immediately upon everything else that is attempted. How can such a test be organized within the school?

REFERENCES

- 1. John Dewey, School and Society. University of Chicago Press.
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CHAPTER III

THE SCHOOL AS AN ORGANISM -- MONARCHY

The consideration of the question at the end of the last chapter will lead us to look more carefully into the internal organization of the school as distinguished from its service to society as a whole. In order to pursue this inquiry as inductively as possible, actual cases of schools which have specially manifested the social spirit must be studied in detail, and we must ask in these cases to what extent the pupils are self-organized and productive members of the embryonic society to which they belong. What social satisfaction do the pupils themselves get out of their life is a question which must be asked of every school.

In illustration of a similar theme, Professor Jenks (1) cites an experience of his own, the public nature of which, he says, should have been made manifest to him at the time. "When a pupil in a district school," he goes on, "I trudged off with a comrade a quarter of a mile to bring a pail of drinking water, I believe that an added value would have been given to the outdoor freedom if I had been made to realize that I was doing a citizen's duty, working for the public!"

It is not, of course, by any mere dogmatic explanation that a teacher could best succeed, or even succeed at all, in teaching the full social value of such a service. To be socially effective, the action should proceed from the combined desires of the participants. Under these circumstances

various considerations might have entered into the selection of the water carrier, — his personal popularity, his general merit, or his special fitness for the task in hand; but in any event the honor of being chosen by his mates would have added meaning and value to what was permitted to seem merely a release from the irksome confinement of the schoolroom.

As far as the social motive of honor is concerned, it may well be asked if the boy could have felt this any more if chosen by the pupils rather than by the teacher. The psychology of the honor feeling and honor motives lies at the root of much that is best in society, and their deterioration, as Franz Krauss shows in his study of folk death, means the decadence of the race. To wish to be honored by those distinctly above one, means that one respects them and has a tendency to imitate them. It is probably easier to love those above than those below, or to do them a service. How eager we often are to lay our purses at the feet of a real. leader, while needed help or charity is carefully meted out to those on our own level or below it. This is often true where there is no conscious expectation of a return. Our purpose is an idealized one, and arises in obedience to an instinctive feeling. Even when love does not enter in, admiration is sufficient to cause respect and imitation. Lower races in this way imitate their conquerors, and the lower classes aspire to the experiences which they observe in those above them, which they never would have thought of for themselves. In the stimulation of the honor feeling by a superior there is without doubt an important element of social education. But when the teacher dispenses the honors it is almost inevitable that he consults only his own

judgment and is satisfied with his own point of view. His choice often seems to the school purely arbitrary, and a matter of personal favor, even when he is sincerely honest in his purpose. In consequence, jealousy and envy and the sense of injustice are aroused and work the greatest havoc. When the teacher reserves the privilege of honoring worthy pupils, he should certainly try to ascertain the school's point of view and make his action, so far as possible, coincide with it. If he defies it, he has hindered his own ends.

When the school is a boarding school and takes charge of the whole life of the child, a larger number of responsible privileges may be dispensed. This is certainly not often realized in boarding schools, and in many such schools the question, What boys are feeling themselves honored in the activities they are performing? would meet with a rather negative answer.

Of a very different type is the school at Abbotsholme, England, under the principalship of Dr. Cecil Reddie. Here the boys are trained to a high sense of honor by a method which goes far beyond the mere distribution of little privileges. The school indeed has become a state, but it is a state of a certain type. This is plainly indicated in Dr. Reddie's designation of it as a school for the directing classes, and in the fact that the whole life and management of the school is derived from its monarch. This, however, does not prevent a thoroughly willing system of honorable and honor-loving coöperation, and the great success of the institution in realizing the happiness and characters of the pupils raises the question whether a good monarchy is not better than an indifferent democracy.

The social features of this remarkable school, which already has a number of offshoots or colonies in other parts of England, France, and Germany, are founded on an insight into the real capacities and emotional undercurrents of the pupils. As Dr. Reddie claims, the school aims to diminish competition and increase coöperation. This principle is applied in the first place to the natural affections of the boys for each other. The management of the ordinary boarding school often tends to sharpen rivalries. In class work one boy is set against another. Close friendships among the boys are carefully watched and broken up in the fear of unmentionable evils. Such watchfulness against vice becomes so marked at times that it actually suggests its commission.

Dr. Reddie, on the contrary, believes rather in encouraging affection for the purpose of promoting its best and purest development. He thinks that such a spirit is the surest protection against impurity, and that the antagonism of competition is more liable to lead to vice. The boys room together in small dormitories, where they are not overlooked by teachers, but are left in a spirit of honorable confidence. The personnel of each dormitory and the influence of one pupil on another are carefully considered, one of the older boys or prefects having a large share of responsibility. The boys themselves discuss with Dr. Reddie the make-up of their dormitory groups and what habits of manner, conversation, and toilet make for character, health, and a true manly spirit. In such conferences Dr. Reddie is careful not to go beyond the point of view of the boys themselves, or, at most, such a point of view, obtained from him, as they can successfully carry out. They thus feel that it is an

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honor to be trusted, and they help one another to be loyal to the confidence reposed in them. There are rules posted which are not too formal or simple, some of them, indeed, being esoteric, if not occult. It is evidently considered unnecessary to post a rule which every honorable boy would naturally think of and obey. The rules are issued by the head master, but they are explained to the boys, and are accepted by them as right.

Some quotations from these rules, which are beautifully printed by the boys themselves on the school press, will serve to show the coöperative nature of this school.

WHAT ARE THE EDUCATIVE MERITS OF BATHING?

A. The educative advantages of bathing, etc., are as follows:

Of all possible physical exercises, perhaps the most wholesome and most valuable, as well as most delightful, are those connected with bathing. No other physical exercise is so completely a reveling in contact with nature.

Bathing may, indeed, be considered a kind of worship of nature. This worship touches at once all sides of our life, — physical, mental, æsthetic, and ethical; and if we think of the symbolic meaning of all natural things, we must add also that it feeds our spiritual life.

Contact with water, together with the feeling of affectionate mastery over it; exposure of the naked body to the pure air of heaven, to the sun's heat, and, both in the water and on the banks, to the sun's light; bringing the feet, while running about on the greensward, into living contact with Mother Earth; all these are sources of health and inspiration. Let us not forget Antæus, son of Poseidon (Water) and Ge (Earth) (i.e. Force, the child of Motion and Matter).

... One professor invents or rediscovers the earth cure, and will have us walk with bare feet and bathe in earth or mud; another discovers, what seems so obvious, the power of air to heal or ward off diseases of the air passages and lungs; another cures, by means of the sun's heat and light, maladies of the skin till now considered incurable. But we need not go to Germany to find our Mother Nature;

she is as potent in our own England as ever she was or is elsewhere. Let us lay aside unwholesome clothing, false shame, and impure "morality," and no longer be afraid of worshiping nature in naked simplicity.

Bathing affords the supreme occasion for this worship, and constitutes, therefore, one of the chief elements in a wholesome school life. We shall not lose, but increase the benefit by properly understanding it.

HOW IS BATHING, SWIMMING, ETC., ORGANIZED?

B. The general organization is as follows:

- I. The bathing, etc., is under the management of the Swimming Committee, at the head of which are the *Captain* and *Vice Captains* of Swimming.
- 2. The Swimming Committee will have the advice of one of the assistant masters, selected for the purpose by the head master, who will be called the Swimming Master. He will advise on all matters connected with bathing, and will decide, after consultation with the Swimming Captain, whether, on any particular day, when the conditions of weather, etc., are unfavorable, there shall be any bathing, and if so, whether it shall be compulsory or optional; at beginning of term, however, and in any change of weather, he will take the opinion of the head master. He will also act as judge in all examinations for promotion. As far as possible, however, the organization and administration will be left in the hands of the committee. The aim in view is to leave to the boys as much freedom for self-government as is compatible with efficiency and progress in the aquatic arts, coupled with safety to life.

Here follows a division of the boys into seven classes separated by six swimming tests, with the prohibitions for those in the lower classes.

The rules for haymaking begin with the general statement:

Haymaking, with all its concomitant sights, sounds, smells, activities, emotions, and ideas, is not only one of the most delightful events of the school year, but is regarded at Abbotsholme as having an educational influence of the highest value.

WHAT ARE THE EDUCATIVE INFLUENCES OF HAYMAKING?

Haymaking, with all the attendant circumstances, exercises an influence not unlike that of bathing, elsewhere described, for it is a kind of bathing in air, warmth, and sunshine. . . .

Haymaking, unlike ordinary games which are practiced constantly, comes only once a year. If, as here, it is conducted entirely by the boys, under the head master's direct supervision, it affords time and opportunity of seeing at a glance how far the boys, and particularly the seniors, show a talent for unpremeditated organization. . . . Also it affords an opportunity for studying the application of the principle of coöperation to a most delightful though useful occupation, and for showing that leadership is as indispensable in peace as in war, in the serious and necessary work of life as much as in sports. . . . All these influences of the harvest reach the climax when, at length, the last load is dragged up the hill to the hay barn; for then the whole school, aided by full orchestra, marches in procession, singing. As the joyous crowd draws near the barn, suddenly in the cool evening appears, as if by magic, the red harvest moon, rising with soft splendor behind the dark wood on the hilltop beyond; and in the gentle twilight every one feels descending upon him a mysterious influence, as if it were the spiritual benediction of the queen of the night, smiling upon the good work now completed.

Evidently the moon obeys the rules as well as the boys. Happy boys!

As is indicated in these short extracts from two of the dozen or so sets of rules, there is a great deal of coöperation in all the outdoor life of the pupils. The same is true of their domestic life. A certain degree of leadership is permitted and encouraged, as in the case of captains or prefects. The boys are even urged to take the initiative when the head master is not available, or when it is well understood that the head master would approve. The prefects especially, being tried boys who have been in the school for

some time, are delegated in this way. The care of the prefects is likened to that of fathers for their children, and this feature of the school is designed as a training for such a function. The governing attitude of the prefects, as of the rest of the pupils, is not, however, that of invention or experiment; they do not create society or social movements; they are simply loyal to the state which is established and controlled by an admired and well-loved monarch, and feel honored in carrying out his suggestions and commands. They are captains and lieutenants of an authority which neither they nor the pupils under them consciously organize. While they feel their membership in a social whole, which they recognize to be for their own good, they are not directly responsible to the body of citizens, but to the ruler of the state.

The attitude of the head master is evidently one of great care and tenderness for those placed in his charge. Even the rules are plainly designed in a spirit of deepest and sincerest service on his part. He has not put forth automatic commands merely issued to save trouble, but has tried to interest his pupils, and the present writer believes, has succeeded, in penetrating imaginatively the minds and hearts of happy and willing subjects, and in leading them to become followers of the word, and not hearers only.

The reality and depth of the loyalty of the pupils, which is not of a superficial, emotional type, is shown by a number of things, but on a recent visit to Abbotsholme one fact struck me as being of rather special significance. Although many of the boys are over eighteen, none of them smoke, even surreptitiously. On this latter point I satisfied myself by cross-examining one of the old pupils who was making

a visit to Abbotsholme. And yet Dr. Reddie himself smokes quite openly, on the lawns and in his library. There is no watchfulness to prevent the boys from smoking. Its effect is explained to them on the proper scientific ground of the maintenance of health in a growing organism, although, as every one knows, such knowledge alone is often ineffective with boys whose gang or group approves the practice. The boys of this school do not regard smoking as wrong, but as wrong for them until they have matured. There are, after all, many things besides smoking, like marriage, the wearing of long trousers, occasional late hours, or the spending of large sums of money, which are suitable for one age or station and not for another. To be made to recognize this, and yet to be able to do the best that one's own position requires, indicates a higher self-control and a stronger character than to be brought up to think that every detail in a leader may be indiscriminately copied. In the former case there is indeed a true understanding of the reality which it is essential to imitate, and a wholesome assumption that boys are really more like men than monkeys.

It is during the part of the school life which lies outside the class room that the working of the honor spirit is most apparent. Not that the discipline of the classes is something different. The pupils may safely be left alone. They know it to be their duty to pay respectful attention to their teachers and to carry out their wishes. The teaching, too, is made as practical as possible. Modern languages are begun before the classics, and pupils are made to identify themselves as much as possible with Frenchmen or Germans. Boys perform actions, like taking off their shoes, walking, making a bow, and so on, and other boys describe these

actions in the foreign language. The maps used are made, when possible, in the countries which they describe. Visits to the Continent are made by the pupils under the care of teachers. When the classics are studied the boys become Romans and Greeks, and often carry out this spirit in their games. Science is studied in close contact with nature. Bees are kept, trees are cut and measured, houses are built, harvests are garnered. The last load of hay is usually accompanied by a festal procession, led by violins and choristers. The regular time schedule of the school, from 6.30 A.M. to 10 P.M., is scientifically arranged, and with the beautiful chapel exercises twice during the day, its steady unfolding gives a feeling of thorough artistic enjoyment to the visitor. All of this beauty, healthfulness, order, and regularity flow directly from the fertile brain and loving heart of the monarch of the state.

If King George had been half as good and clever, Americans never would have revolted. Even limited monarchies are the result of the mistakes or defects of the monarchs. Such a school as Abbotsholme fulfills its mission and affords an admirable training for the directing classes of a monarchy even as tolerant as that of England. The government of India alone would doubtless profitably absorb as many of such pupils as could be produced.

There is, as already said, a very important social bond and a powerful appeal to the social instinct in being trusted and honored by a superior. In its earliest form we find it at work wherever the clan has developed to the stage requiring a chieftain. The monarch, indeed, is a chieftain carried to the nth power. The Jacobin Loyalists of England show how important, even in recent times, is the claim

of such a functionary. Yet a monarchy never could have existed on a large scale, if it had not effectively extended itself to the protection of interests which grew up independently of the monarch himself. There must be possible under such a government a large amount of organized variety, much more than the monarch is capable of thinking of. When not absolute, such a monarchy is really a disguised democracy. The old forms have been retained, but a new life has partly filled the mold. The loyalty of the citizens of England to their king is only apparent when challenged. Most of them are not thinking of conducting their lives after his model or as he would wish to have them. The directing classes alone may be appreciably influenced by such motives. To find a prototype for a school monarchy like Abbotsholme, we should need to go much further back than the present condition of England. King Arthur and his court, or the early kings of Greece and Rome, may possibly have furnished such an example, although the modern instance, through its modern ruler, is full of the impress of modern times.

It is evident that the pupils of such a school are getting a great deal out of it, and this of an immediate social character. The school is a real organism. The habits of life, moreover, are of a kind calculated to reproduce themselves. Tastes and interests, the habit of loyalty and the love of honor acquired and developed here, are likely to be continued after the pupil goes away. The school is tested in this respect by the parents, and its maintenance and growth depend directly on their approval. In the school itself the head master is also constantly observing and testing the pupils as to their health, their tone and bearing, their

courage and fidelity in carrying out the spirit of the institution.

Having admitted so much in favor of an almost ideal school monarchy, it may be feared that there can be little left to say in behalf of democracy, and yet in America we are committed to democratic government, and unless the spirit of democracy appears in the school, it must in some essential way be failing in its trust.

In the first place, however, we ought to make the claim for the ideal American school that all the best virtues of a monarchy should be retained in a democracy, which, unless it is a higher development of a monarchy, has no reason for its existence. The pupils ought to have the experiences of loyalty to those above them. They should wish to be honored and trusted by them, and they should feel the social satisfaction and sense of responsibility which comes from such confidence. Democracy does not mean that there should be no superior in authority or in station. Even forcible compulsion and implicit obedience are frequently necessary in a good democracy.

What democracy means is a fair chance for the development of all the opportunities there are. It means that the blessings of life shall not flow constantly from one source, and that not one and his lieutenants, or even a few, shall rule continuously, but that every citizen shall have an opportunity of dispensing honor for social service well performed, and of removing those who fail in this respect. It means that the virtues and opportunities of the best monarch may become the virtues and opportunities of every citizen who is capable of them. Going further than the easier love and admiration that looks upward for guidance, it must also

develop to the highest degree the care and appreciation which looks downward or to those on a similar level.

Not only the power of directing one's self under the eye of a superior, but the power to create plans and direct others should be widespread in a democratic state. As general statements these truths are trite and uninteresting. It is in the concrete facts which they represent that true problems arise. Applied to the school, it may well be asked if the exhibition of the character of a noble monarch is not a great stimulus, not merely to loyalty but to initiative. This is undoubtedly true. A case in point may be cited from Abbotsholme itself. A boy, when asked what he would like to be, replied that he should like to be a teacher. This is pointed out by Dr. Reddie as one of the best recommendations of the school, and it certainly is. But what opportunity is there under a monarchy, not perhaps for the practice of all the socially creative powers necessary for such a teacher as the head master of Abbotsholme, but for any considerable part of them? Mere lieutenancy, however trusted, cannot afford such a rôle. The boy will be forced to remain, so far as the highest appreciable features of his model are concerned, in a passive attitude, and await some future time before he can attempt the active realization of his ideal. When he finally comes to it, he may discover, or others for him, that his socially active and inventive powers are weak and undeveloped, and that he is forced to become a mere imitator of lower qualities than those which were controllingly operative in the original. There is thus some loss in the transmission of life, to say nothing of the liberation of new and undreamed-of powers.

No one will be so shortsighted as to think that a boy can suddenly be placed in the position of a teacher or the head master of a school, or that he could even act suitably as a substitute or monitor. The boy himself, if he possesses common sense and does not simply wish to play, would be among the first to see the futility of such a step. What the boy really means when he says he should like to be a teacher is only to be discovered by applying the test of action. His answer might have been flattery, or, what is more likely, it might have been an expression of that loose dreaming, which, as Mommsen in his study of Cæsar shows, makes the mere idealogue rather than the practical idealist. Not that one need to be in a hurry to kill out all immediately unrealizable dreams, but that it is necessary to give practice at all times in life in the working out of dreams that can, within a reasonable time and with some degree of probability, be made to come true. But the progressive realization of a dream or ideal is the natural means of its control and the natural source of its sane development.

The boy's notion of becoming a teacher, if offered as a real plan, could be met with inquiry so as to get at the widest range of his point of view. The full vision of his model is, of course, not possible for him. What are the aspects, however, which have appealed to him? From this as a basis, it would be necessary to add some features of self-revelation on the master's part, which could be understood. We might imagine him saying: "What have I, as a teacher, to do? I must say, must I not, what the boys are to do, and think of such things as are good for them, so that they will do them willingly and cheerfully. Can you get any boys to do what you suggest and keep them at it

until the purpose is accomplished? What would these things be? Would they be worth while? How could you attract these boys? What would be the difficulties in the way?" The duties of scholarship and the necessity for keeping up his school work are so obvious that it would hardly be necessary to emphasize them. These duties were very likely not the source of this boy's desire to teach. It was probably something more vital than mere learning that attracted him.

Propositions like these, however, go considerably beyond the monarchical state even when this conceals, as at Abbotsholme, much that is democratic in tendency. They may be judged unpractical and visionary, but it is at least clear that they are of the very essence of democracy. The carrying out of great varieties of such schemes, properly organized and dovetailed into each other, would seem likely to give us a school not for the directing classes or the directed masses, but one capable of training the masses to direct themselves. This is not accomplished when, as in an ideal monarchy, each boy controls himself, either from mere selfrespect or for the love and honor which he feels flowing to him from a superior. For a democracy it is also necessary that a pupil should get an opportunity to direct others, to change and mold their opinions, and at the same time to submit himself as a leader to their uncoerced approval. This means a social situation which would call for and develop a higher and broader kind of control than that which is mainly confined to self, and it would use resources and expansions of the social instinct which are characteristic of the present condition of civilization.

REFERENCE. 1. Jeremiah Jenks, Citizenship and the Schools, p. 32.

CHAPTER IV

THE SCHOOL AS AN ORGANISM — THE REPUBLIC

In order to show what difficulties underlie the realization of such a conception as that suggested in the last chapter, and to trace the active working of the democratic spirit as it appears in the internal organization of some of our schools, let us turn our attention to some contemporary examples.

The George Junior Republic of Freeville, N.Y., is an instance of a school which is consciously organized on a social basis. That it performs a great social service to the community cannot be doubted. It has awakened interest in hundreds of people who have come from all over the country to study it, it is supported by private beneficence, and it has turned out, since its foundation in 1895, a large number of boys and girls who have been reclaimed from vice and set on the way to become self-supporting citizens.

Published accounts of the Republic have not been critical, and have always been short. When passing beyond a description of the mere appearance of facts, they have been exceedingly laudatory. The complaints that have been raised have had but a newspaper basis and an ephemeral newspaper circulation, and have been satisfactorily disproved by the investigation of the Society for the Prevention of Cruelty to Children (1).

In view of its importance there is greatly needed at present a larger and more complete study of the institution.

With such material as is at hand, however, and with personal reports obtained from visitors and some conversation with Mr. George himself, the founder of the Republic, the present writer hopes to be able to convey an understanding of the essential features of the school.

"The territory of the Republic," says Dr. William I. Hull (2), "is even smaller than that of Marino, being only forty-eight acres in extent, and its buildings are few and simple. In the winter its inhabitants are only forty-four in number, twenty-seven boys and seventeen girls; and in the summer, when the tide of immigration rolls in, the population increases to two hundred and fifty, and tents are erected to supplement the few simple buildings." The boys and girls in attendance, all from twelve years of age up, are for the most part drawn from circumstances far from favorable. Of thirty-one members in the roster for one of the earlier years, all were described as less than promising. Characterizations run as follows: arrested for crime; a young tough; an all-round disagreeable character; wayward young girl from bad home; thief and runaway; degenerate (now in insane asylum); typical street Arab; wild, arrested for truancy; a rowdy girl; wild street boy, leader of a gang. With the exception of the one in the asylum, all of these thirty-one have for the most part decidedly improved. Some of them are in college, others in business or in responsible positions (Report of Bureau of Labor and Charities, Syracuse, N.Y.). There is thus an unfortunate selection of the pupils, whether voluntary or not, which must be constantly borne in mind by the investigator. The pupils, moreover, are not free to leave, nor in many cases are the parents free to take them away.

The social features of the school which strike the visitor most forcibly are its industrial and economic basis and the degree to which the pupils exert the strong arm of coercion in carrying out the laws. These laws are sometimes said to be made by the children themselves, and a part of them undoubtedly are; but the original constitution was given to them by Mr. George, and other measures have also been introduced by him. The constitution imitates as closely as possible the Constitution of the United States. There is a Congress, consisting of a Senate and House of Representatives, which "has the power of passing laws in harmony with the United States Constitution and the laws of New York State" (3). Mr. George at first was the president of the Republic and had a veto power over its laws, "but now there is a boy president, whose veto can be set aside only by a two-thirds' vote of the Congress." There are courts, judges, guards, a jail, and a police force, but without the industrial and economic basis these would be of much smaller importance than they are. The fundamental condition of the organization is that the pupils work for their living. The motto of the Republic is, Nothing without labor. In proportion to the work they do, wages are paid them in imitation money, which is valid only within the Republic. The labor day is from eight thirty to twelve, and the wage from fifty to seventy-five cents per day. No one need go unprovided with work. It is the part of the superintendent, Mr. George, to give or make work for every applicant, whether on the land or in the care of cattle, ditching, leveling, chopping, sweeping, bed making, cooking, waiting on table, etc. (4). Work is outlined and controlled by the school state. It is, however, sublet to

individuals, who can hire other workmen. No one, of course, can become a contractor without sufficient capital. A premium is thus placed on thrift.

A citizen who can afford it may live in very comfortable style. "The hotels, as they are called, are of three grades, from the Hotel Waldorf, on the second floor of the main building, where the millionaires sleep, and pay twenty-five cents a night for the privilege of having a tastily furnished room to themselves, to the lowest class of lodgings in the attic, where the unsuccessful business men or the idlers must take up their quarters at ten cents a night. If the citizen has no money to pay for lodgings, he must pass the night in the station house, and in the morning is arrested for vagrancy and made to work out the fine imposed." "The restaurants also are let to contractors, and their prices vary from fifteen cents to twenty-five cents a meal." "In addition to the contracts let by the government, other industries have sprung up. The boys become carpenters; retail venders of fruit, candies, and other commodities dear to children's hearts; public officials; lawyers; and skilled laborers of various kinds. The girls turn to sewing, clothes patching, stocking darning, and housework." Fines imposed by the court thus cut into the necessary means of a good livelihood. Hunger or personal comfort, if no higher motives, tend to enforce the laws.

In the winter time, especially when work is scarce, some of the older boys are selected to act as "schoolmasters." They prepare questions on all sorts of subjects, ferreted out from histories, geographies, encyclopedias, etc. These questions are distributed and the successful answers paid for. The usual expenses of the citizen are met with the money

thus obtained, — certainly a very extraordinary departure from the seemingly industrial foundation of the school.

Apart from the labor and book learning, there are hours for play and recreation. Christian influences are constantly brought to bear, and everything possible is done by Mr. and Mrs. George to establish the friendly relations of a home. Being divested of the rôle of a constantly active disciplinarian, the superintendent is more free to proffer advice and counsel, which may or may not be taken, as the citizen decides.

It is to be noted that back of all the pupil machinery of government stands Mr. George. As the report of the Labor and Charities Commission says, "It is to be understood that it is the policy of the management to advise sparingly and to command only when necessity requires." Formerly the industry on the farm was carried on by industrial classes, "the citizens being enrolled in these, and paid according to the number of hours spent in the acquisition of technical knowledge. . . . The class system was done away with and the contract system substituted in accordance with Mr. George's aim to introduce into the Republic as many of the conditions of ordinary life as possible. . . . An inspector for hotels is employed by the government and makes his rounds daily, accompanied by Mrs. George, who fines the inspector if he fails to discover any faults of omission or commission." As Mr. Hull goes on to say: "If we are consistent believers in the American political theory, we must admit that the machinery adopted by the founder of the George Junior Republic for carrying on its work is the best which the mind of man has developed. But mere machinery is useless without a motive force, and this motive force is largely supplied by the clever brain and kindly heart of Mr. George "(5).

We must, however, avoid being deceived by mere machinery. It is the spirit and not the letter which maketh alive. In the adult state there may be machinery which is useless or even pernicious, but, apart from vicious intention, that is usually because it has been useful at some previous time. Real law and real government in real communities spring up to protect real interests which could not advance without their guardianship. Effective voting is not simply a registration of opinion; it is a registration of an opinion about a vital issue. And just because of this, it is more than the registration of an opinion; it is the expression of the amount of force in fighting units which would be available, if necessary, to back up this opinion. Voting came in during the course of history as a substitute for a show of arms. The invention of gunpowder, which put the means of defense into the hands of masses of men, was a necessary prerequisite for a wide diffusion of the suffrage. The mere right to vote does not characterize a citizen or a state, although the lack of it sometimes does. In clan life a new band was often formed when some one arose, proposed a project, — a marauding expedition, perhaps, — and asked for followers. Those who elected to go with him, by that act also elected him as chief, an office he held only as long as his success was approved by a sufficiently strong majority. When the Afghans in the eighteenth century captured Ispahan and destroyed most of the citizens, this barbarian host, in their rude, indeliberative way, exercised a suffrage among themselves.

Government means force and the power to coerce the minority. If it did not mean this, but consisted of a mere registration of opinion, the aims of the philosophical anarchists would be reached, and all of our apparatus of courts, jails, mayors, congressmen, commissioner of police, etc., would be sloughed off as an expensive luxury. When voting does not represent fighting force and its intelligent organization, it becomes a farce and is easily overridden. This is evidently the condition of affairs in the negro belt of the southern states. When society can get a more direct registration of its fighting ability by counting the votes of women, or can estimate with more delicacy and accuracy the number of fighting units by employing women in responsible governmental positions, it will be forced, in order to survive, to extend to them the suffrage and to call upon them to share in executive government. This is, of course, not unreasonable and not an impossibility, but mainly because of the influence of women over men, which, however, they already exert, -and not because it is likely that women will ever make good soldiers. Voting is not for individuals, but for society.

The real characteristics of a citizen in a civilized community are indicated much more truly by the votes that he influences than by the single one that he casts, but even this function is not the real measure of his value to society. The forcible protection which government exercises is always a means to an end. This end consists in the interests, the plans, the schemes, the desires and ambitions, the many-sided life of civilization which springs up in the hearts of all mankind. Where these are of such a nature as to run counter to the social good, coercion is

necessary to restrain or destroy them. When, on the contrary, they exist but in a weak and feeble condition, and if they are recognized as of value to society, it is equally necessary to supply them with the means of growth. Force, however, can never make plans grow where there are no plans in mind. People cannot be made good by compulsion. Just sufficient force to fulfill these two functions of protection and of sustenance (not necessarily of the weak, but of the socially desirable) is all that is required. An excess is wasteful.

In early societies everybody was a policeman, and blood revenge was the duty of each, not simply for his own sake, but in obedience to the social instincts of all. To-day we economize these executive powers by delegating them to as few as possible, and thus secure for the rest freedom to engage in other concerns. If there are interests and plans of a social value, which even the weakest member of society entertains, this delegated force should be at his disposal, to protect him from imposition and to help him in his ambition. If women, for example, are unable to carry out socially valuable schemes of life because coercive force stands in their way, fails to protect them, or refuses to help them, the government as it exists is seriously faulty and unjust. Whenever the strong arm of compulsion is required, men will be necessary to carry it out. Executive government is, after all, nothing but a policeman on a larger scale.

The same conditions apply, with even more cogency, to children. The exercise of physical compulsion or constraint can never spring from them so long as they are part of a civilized community; nor can it ever be rightly exercised

by them except in so far as they act as delegates or messengers of a power which they do not help to create. Force, however, by virtue of the social life within us, is bound to be exerted on their behalf. Their best interests and desires should be fostered and protected and their best development guaranteed. In so far as the coercive aspects of life in the George Junior Republic are concerned, it is an illusion to suppose that it has evolved either a government of the people or by them. All the machinery of force which characterizes the school, down to the guns (unloaded, I hope) which the guards carry,—as shown in photographs, - is superfluous and unnecessary. A good deal of it is, of course, a play which is educative in a certain sense; that is, the children get a dramatized presentation, in which they are themselves the actors, of the way in which governments are run. A play, however, necessarily leaves out that particular factor which makes the interest real. It is Mr. George, and the authority vested in him by the adult state, that is the real force back of all the children's laws. These must be, in reality, verified by him in order to be valid.

The same thing is true, at the bottom, of the industrial and economic features. The Republic does not maintain itself, and there is only that discretion in pecuniary matters that is permitted by the superintendent. If boys go in rags or live poorly, that is approved by him as an instructive experience.

Does this mean that there is no social self-organization on the part of the pupils? Not at all. Mr. George, perhaps unnecessarily, masks the flow of honor from him to the pupils, and substitutes for this a machinery of offices and laws; but in doing this, does he prevent the children

from getting out of their experience all that is possible for them in the understanding and appreciation of a superior? That the laws do not prevent the children from feeling and knowing that Mr. George is the real mainstay, the real ruler, can hardly be doubted. But how is this controlling will to be approached? Not by wheedling, not by personal service, smiles, or conformity to a few arbitrary rules of conduct. This will chooses to be approached, so far as the fundamental necessities of food, clothing, and shelter are concerned, in one way, and that by the skill with which each individual shows he can play the game of the Republic.

These boys are surely sharp enough to find out what their work means. Do they think that they are working for Mr. George, and that he, perhaps, is making his own living from the overplus of their efforts? If this were so, it would suddenly reduce the Republic to an economic reality. The children, at least the intelligent ones who would act as leaders, probably know well enough that they are getting a greater return for their labor than they would elsewhere, and that the institution is mainly supported by private subscriptions, which Mr. George alone is able to obtain. What they must realize at the bottom is Mr. George's fatherliness, which is not an economic condition to them. His favor, however, in matters economic, is bestowed not on individual boys as he may think they need it, but on the Republic as a whole. The honors and the honorable positions that are dispensed are created by Mr. George, but the least of these may be competed for by all the children in the Republic.

The honorable position at the lowest end of the scale is that of a poorly paid laborer. Here there is no competition, as there is in the real world, since the superintendent finds work for all. The more highly paid are more honored by their comrades, and of course by Mr. George also. At times it seems as if the Republic expected pure self-interest, apart from social instinct and the love of being honored and looked up to by others, to inspire the workers to thrift and ambition. But these former motives can hardly be the controlling ones, and if they were, such a condition would afford the gravest ground for complaint on the part of the public at large.

One of the most desirable positions is that of policeman. Unfortunately the street experiences of a New York boy make him regard the policeman as about the summit of human greatness. But there are evidently other more practical reasons at work. A policeman in the Junior Republic gets pay, and during the time he is on duty he does no manual labor. How many policemen does the Republic need? How is this decided? If the mere selection, but not the creation, of the policeman is in the hands of the children, it would seem natural for them to have as many policemen as possible. In adult society, on the contrary, we have as few as possible, since their maintenance is a tax on the community. If food obtained by individuals in the Junior Republic depended on the combined efforts of all, instead of on the individual efforts of each, it would be a more thoroughly social institution than it is. If this were so, it might possibly be seen by the children that since they are but few in number they could do very well without special policemen, and perhaps without their extravagant legal paraphernalia also.

It is not, however, certain that they would see this of themselves. The connection between policemen's support

and the economic basis might be remote enough so that in gratifying their immediate desires, including their social instinct, without intelligent reflection, they would at least lower greatly the earning power of the community. The negro republic of Haiti has degenerated economically, partly because positions in the army or government were multiplied far beyond their serviceableness to society. Meanwhile the means of production, roads, schools, etc., were being starved because there was not foresight enough to raise and apply taxes for their proper maintenance. Possibly American boys and girls might not make such a mistake, and the small number in the Junior Republic would make both social oversight and foresight more practicable. But if they failed to see so widely or so far, surely they should have the advice of the superintendent, based on exact estimation and calculation. Mr. George at present uses his influence to advise individuals. Why should the little society as a whole not receive the best advice, — I do not mean commands, — instead of being allowed to discover things by groping in the dark? The trouble is, of course, — in answer to this, — that the little society as a whole does very little experimenting. Their constitution is already laid down and their laws are already promulgated. As a society they do not exercise much, if any, control over the means of subsistence.

Advice, however, might be given, but not followed. If this resulted in a permanent lowering of the desirable activities of the little society as a whole, it is plain that, since it is, after all, but a part of a larger society, authority and force should be used, and the advice would become a command. Instead of a large number of policemen desired

by the society, which would result in lowering its productiveness, just that number would be allowed which was judged by the superintendent to be sufficient. This is, however, the present condition. It is difficult to see how the service done by the policeman is felt by the children to be a service so needful that they would sacrifice anything for its continuance. A real social basis for the honor feeling, arising from the individual benefited by the service and bestowed upon an individual chosen to perform it, does not obtain. The policeman may be looked up to and honored because he is clever, has passed his civil service examination (a necessary prerequisite for a policeman), and has got an easy job, and not because he is felt to be of much use. Honor has been bestowed upon him for some service, but not primarily by the citizens of the Republic. In his selection, however, from among a number of candidates, there is a real although limited opportunity of bestowing honor. Here it is serviceableness in his office that ought to be judged, but how can this serviceableness be measured? Is it not likely to be his affability and pleasant manner which count for most? These are, of course, social services, and especially appropriate in a policeman, if at the same time other aspects of his duty are rigidly performed. The test of these latter may be passed up to judge, congress, and president, but it must come back finally to Mr. George. The difficulty is that the Junior Republic cannot fail or go to pieces, and cannot even be lowered permanently in economic or legal well-being.

This is, of course, as it should be. Children have a right to be protected from economic strain. This is the most fundamental fact about children from a societary point of view. To come into contact with real economic conditions too early stunts mental and moral growth. Children are like seedling plants which put forth leaves and begin to strike root on nourishment which they did not elaborate for themselves. Partly embryonic from a physiological standpoint, they are still more so from a social one. Schools are social embryos. They cannot be little states modeled after that of adults. A physical embryo may be provided with gill slits, but it is not a fish; it may have the sauropsidian liver, but it is not a reptile. Neither is it simply a little edition of an adult human being.

Similarly with the school. It cannot be simply a reproduction of an adult society, and yet the laws which govern it and the motives which actuate its components must be at the same time really social and show plainly that they are developing into something better. Progressive change, therefore, rather than the fixity of a constitution, we should expect to find characteristic of a true child society. Its point of contact with adult society is as vital as the function of the placenta in the physical embryo. Since the school is an organism which is the result of conscious thought, we must study it to find out what this point of contact essentially is. If it is of such a nature as to hamper the best spontaneous development of the school itself, either by being too lax or too stringent, the organism suffers, and society as a whole is defrauded of its rights.

Two important points of contact, as we have tried to show in our analysis of the Junior Republic, are the application of force and the protection from economic strain. But it is just at these two points that the management

of the Republic tries without success, except as a play, to imitate adult society. Economic conditions and the use of force enter into every school. Their favorable or unfavorable action is keenly felt. But the children cannot be held responsible for the results, and although they may receive the benefits, they cannot wisely or profitably control either of the factors at work.

Mr. George's problem, however, was to develop the children by getting them to use whatever power of social selfactivity and social initiative they did possess, rather than to have them depend constantly on the command or direction of a superior. It is only where failure is possible that this result can be obtained, and it is in the comparatively non-coercive features of the Republic that we actually see such a possibility realized. This comes out in business ventures. A Junior Republic capitalist takes, for example, a contract. He hires such boys as he can depend on. If it is a restaurant he is running, he must please his customers, or they may go to other places. If his plan does not work, he soon loses money and fails. If he succeeds, he has employed a number of laborers in positions which they like better than certain others. They are loyal to him as he to them. There are honor motives on both sides, arising from the differentiation of talent or on account of property won by work or serviceable insight. The boy is a real leader for real purposes which he can measure and control. Such a social situation, however, exists within the circle protected by force, and could be applied to other needs or aspirations than to feed a clientele or to enrich one's self. What range of opportunities for such plans and schemes does the Republic really afford?

Is it not true that these opportunities are limited largely to economic and legal matters, and do not rise frequently enough into the higher sphere of idealism which is peculiarly the heritage and the functional place of children and adolescents? The reduction of book learning to a falsely economic basis is an indication of this fact. Curiosity about the non-legal and non-economic world, wonder and admiration of nature, joy in construction of things that have no economic value, — boats, cars, clubs, dramas, etc., — even acts of unpaid labor for social loyalty and devotion, quite capable of being socially organized, are natural to children, and are much more essential and fundamental to the life of society than premature skill in earning a living.

It is, in fact, the development of such idealisms in the shape of science, whether of nature or of humanity, which have created our modern life with the vast industrial system on which it floats. It is these, too, which hold it together in the face of destructive tendencies, and which we hope may yet be able to improve the present imperfections under which we suffer. To develop these idealistic characteristics of children, it will be noted, has always been the aim of our culture schools, and in this they partially succeed. Where they fail it is due to imperfect understanding not only of the child as an individual but of children in their social relationships, rather than to an error in the aim itself.

The motto, Nothing without labor, is one which is much more suitable for the Junior Republic than for a home or a school composed of normally constituted and normally situated American children. The function of the Junior Republic, as Dr. Lincoln points out, is mainly the rebuilding of moral ruins. The children are already

preternaturally and morbidly sharpened on just these legal and economic aspects of life. To show them what these powers are, at least to some extent, and to show them that they do not necessarily hurt, it may be wise to emphasize them in such a school. The children are probably overindividualized before they come. The cruel necessity for self-maintenance and self-protection has been forced upon them, and has already tended to degrade them socially. The narrow virtues of individual self-control rather than the service, care, and thought of others may be the only ones which powerfully appeal to them, and which at the start can be successfully added on to their earlier experiences. That to some extent, at least, the conditions and the rewards of this control come from their own companions rather than from Mr. George, affords an opportunity for their debased feelings and low views of life to rise to something more truly ethical and social. But just in proportion as this is true, the Junior Republic, without the substitution of something more educative for its exaggerated economic and legal features, does not form a good model for the democratic American school to imitate.

It may be that the school city of Mr. Gill arose as such an imitation, or it may have been an independent conception. This is a plan of organization which consists in putting into a school grade the government paraphernalia of a ward or district of a city, or sometimes of the city itself, in having laws, district courts, attorneys, etc., and especially policemen. In a day school economic factors are of course impossible.

In New York City, where the question of imitating present city government gives rise to some qualms, the Ray

System is sometimes used. This is modeled after Roman fashions, and provides tribunes, senators, lictors, etc. It will be noted that the focus of attention is still occupied with government functions rather than with broad social activities. True, in adult society, government functions are indispensable and decisive, but they exist mainly to protect other interests which the citizens have originated and which they hold steadily at heart. These interests, too, are not wholly individualistic and selfish, but are such as require coöperative organization for their development.

In a school we have the necessary force, represented by the teachers, to protect all real educative interests likely to arise. The added compulsive force of the children ought not to be required. It is enough that they tacitly acquiesce in its administration. Their effort and coöperation should rather be enlisted in the work of voluntary committees or groups, brought together naturally by a common interest or purpose.

The term "self-government" has often been a misleading one in educational discussions. It has frequently been used to signify self-control, either in the individualistic sense, or as the self-direction of groups without outside compulsion. In either of these interpretations self-control, which is of course essential to all high social development, goes far beyond the requirements of government. What is really needed in our schools as a preparation for democracy and our highly differentiated society is not self-government, but self-control and the self-direction of groups.

It is the latter requirement which is the most significant, and also the least understood. In adult society selfdirected groups abound. Every church in America is a

good example of this fact. In earlier times a church was an affair of coercive government. Forced taxes were used for its support, and attendance was compelled by fines. It is plain that this was a wrong use of force, which is now applied only for the purpose of protection, or sometimes to foster externally, as when taxes are remitted on church property. The church, however, directs its internal affairs without compulsion. Voting or parliamentary rules of procedure are often used, but it is plain that they have quite a different significance from what they have in the state. In the church they mean merely a registration of opinion, but no compulsion follows. Individuals who are dissatisfied can leave the church. No one, on the contrary, can avoid the control of a government unless he leaves the country and swears allegiance to another one; and even in this case, in the most important matters, the laws are the same. Extradition, too, if he has broken the law, may follow him to another state. Besides churches, there are committees, voluntary organizations, etc., which carry on projects and interests, and hold themselves together and are self-directive without the need of compulsion. They are founded on the common purposes and the natural social capacities and affinities of their members, and are free, voluntary, and highly social only because they are easily capable of going to pieces. To succeed here, even as a follower, is an honor; to lead, a triumph.

It is the introduction into our schools of such voluntary, self-directed purpose groups, rather than the functions of coercive government, which may be expected to gratify the social instinct of the children, to develop their resourcefulness and initiative, and to fit them for the complicated life

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of present society. It is in this direction that the school may show itself naturally and easily as an embryonic social organism, manifesting its own laws of growth, rather than as prematurely molded after the model of a not too perfect adult community.

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CHAPTER V

THE SCHOOL AND SOCIETY

Among the most significant of the educational experiments of a social nature that have appeared in recent times, is what is familiarly known as the Dewey School. This school was started by Professor Dewey, when he was in Chicago University, in order to work out some of his educational theories (1). As designed by him, the institution no longer exists, but it has been merged with the Emmons Blaine School, originated by Colonel Parker. The combined school is now under the direction of The University of Chicago.

It will be impossible, in an essay of this character, to give a satisfactory account of Professor Dewey's point of view as an educator. This springs from his position as a philosopher, which is again necessarily implicated with certain very strong and original views in logic, epistemology, psychology, and ethics. The general trend of these views is quite in the line of the modern movement in these studies. Psychology is looked upon as essentially functional, and although differing greatly in detail from James, Peirce, Schiller, Bergson, and other pragmatists who are at all careful about their presuppositions, Professor Dewey, in agreement with these authors, makes will or intention the prominent or controlling feature of the science. In logic the modern thought has been, since Mill, to emphasize

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inductive thought as a whole process, in which deduction plays a subordinate part (see chapter on Reasoning). Experience, fact, verification, are regarded as the real sources of validity of all categories, which, instead of being set eternal in the heavens, are really nothing more than working hypotheses. In ethics the discussions of ethnology have compelled a similar point of view. The moral nature is thought of as a result of successful social experience, and it is shown that different times produce different consciences as well as different manners (2).

Professor Dewey, in his analytic writings, has ably carried out these views, which are not positivistic in the usual sense of the word, and have no quarrel either with theology or philosophy, since they are themselves philosophical or speculative in the best sense. To show their peculiar strength or weakness, a much more thorough examination would be necessary than is possible here.

As a true pragmatist, however, Professor Dewey was forced to do more than analyze. It was essential that he should carry on the experimental life, and not only test his theories by practice, but obtain from this practice the necessary corrections of his theories. For this no better field could offer than the school, and especially the elementary school, where social as well as logical motives are comparatively simple and undisguised.

Professor Dewey regarded his school as a laboratory, and called it an experimental school. He started not so much from the point of view of the child, as from that of the course of study, and his aim was to find a course of study which, after being thoroughly tried out in this school, would be suitable for application in others. This accounts

for some features which have often been found objectionable by so-called good disciplinarians. The material or activities to be presented to the children, after being worked out by the teachers beforehand, must not be forced upon them by too great enthusiasm or by suggested coercion. The children must be allowed the opportunity to show their dissatisfaction and restlessness if their interests are not naturally engaged. While they did not initiate any leading portions of the course of study, the children were expected to coöperate in the details of its execution, and were practically permitted the freedom of rejection. In its application to other schools such freedom was never presumed. It was only for the purpose of the experimental school that it was to be tolerated.

Whether the children of the Dewey School knew that this was the theory back of their lessons is not so important. They soon enough discovered its working effects. These effects, however, were at no time, during any visit of mine to the school, productive of noticeable disorder. New adaptations of the course of study were constantly being made. Phases of work which attracted the children were also being discovered. On the whole, the children were interested in their work. Such a degree of interest, indeed, as they manifested is never to be found in a school which is clamped down to prevent natural reaction on the part of the pupils. Schools of this latter type are equally experimental, although as a rule the experimenter is not provided with sufficient intelligence to know when to stop.

Professor Dewey states that there were four principal problems which were worked on from the beginning of

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the school: (1) the question of the unity of the child's experience, and the need for maintaining the connection between home and school life; (2) the question of importing richer subject-matter into the usual seventy-five or eighty per cent of merely form studies; (3) the connecting of these necessary formal studies - reading, writing, and arithmetic — with subjects which appeal to the child on their own account; (4) individual attention, which, it was hoped, would be secured by small grouping of eight or ten in a class. In working out these problems, "shopwork with iron and wood, cooking, and work with textiles (sewing and weaving)" were emphasized. A certain amount of geography, scientific work, chemistry, and art was naturally correlated with them. On the history side primitive occupations were used, designed to show the child the steps of progress and development, especially along the line of invention, by which man was led into civilization." The groups or small classes were formed at first of children of "different ages and attainments," since it was believed that "there were mental advantages in having the older assume certain responsibilities in the care of the younger. As the school grew it became necessary to abandon this method, and to group the children with reference to their common capacities. These groupings, however, were based not on ability to read and write, but upon similarity of mental attitude and interest, and upon general intellectual capacity and alertness." The groups were always formed by the teacher in charge.

Two general and closely related aims of the school were to give the children whole activities rather than small sections of work; and, by bringing the children into contact

with various teachers and various influences, to prevent the isolation which is often the result of the grade system. Such a purpose is evidently of a highly social character, especially from the standpoint of the relationship of the children to the essence of the past life of society. A clear insight into the past is at least one way of grasping the more complicated elements of which the present is composed.

Professor Dewey's book and his articles on education are full of suggestions and demands which, if capable of being carried out, as the reader is prone to understand them, would probably realize the beginning of a true social democracy in the school. There are no unnecessary economic or legal complications. Essential societary organization is seen to be a much broader affair than mere government, and must affect the course of study rather than confine itself to policing. The aims and ideals of a true culture, rather than a narrow preparation for life, are held constantly before the mind. "Education is life, not a preparation for life." The school is often described by him as a social embryo, and the spontaneous interest and attention of the children are spoken of as the sine quanon of the teacher's art.

Between some of the most significant social ideals for the school and the particular exemplification of them as expressed in Professor Dewey's writings, there is, however, so far as the present writer is able to understand it, an irreconcilable gap. On the one hand, Professor Dewey gives a clear and logical account of many of the social needs and functions of a school; on the other, things as they are worked out in the school itself, and described by him as examples, fail to convince the observer

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that they would actually fulfill the necessary requirements. As the politicians say, he does n't deliver the goods. No doubt the realization of any theory of education always meets with serious obstruction in practice,—lack of understanding on the part of the teachers, and material deficiencies as well as the nature of the children themselves; but these difficulties should return upon the theory and modify it, if it is to maintain itself as a guide and remain free from the suspicion of being, to a considerable extent, a priori and ready-made. A less seemingly perfect and logical theory may thus be really a truer working hypothesis and a more effective means of promoting both theoretical and practical progress than one apparently strong in every part.

Professor Dewey sees very clearly the tremendous social defects of the usual type of school of the present day, its narrowness and dullness, its isolation from life and the isolation of the children from one another, its emphasis on the mere absorption of facts by uncoöperative individuals, its competitive standards of success, the negative character of its discipline, — and he rightly claims for a reasonable education more active work, where it is not a crime to help one's neighbor, but where a "spirit of free communication, of interchange of ideas, suggestions, results, both successes and failures of previous experiences, become the dominating note of the recitation" (3). In another pregnant passage he says, "We must conceive of work in wood and metal, of weaving, sewing, and cooking, as methods of life, not as distinct studies. We must conceive of them in their social significance, as types of the processes by which society keeps itself going, as agencies for bringing

home to the child some of the principal necessities of community life, and as ways in which these needs have been met by the growing insight and ingenuity of man; in short, as instrumentalities through which the school itself shall be made a genuine form of active community life, instead of a place set apart in which to learn lessons.

"A society is a number of people held together because they are working along common lines, in a common spirit, and with reference to common aims. The common needs and aims demand a growing interchange of thought and a growing unity of sympathetic feeling. The radical reason that the present school cannot organize itself as a natural social unit is just because this element of common and productive activity is absent. Upon the playground, in games and sport, social organization takes place spontaneously and inevitably. There is something to do, some activity to be carried on, requiring natural division of labor, selection of leaders and followers, mutual coöperation and emulation. In the schoolroom the motive and the cement of social organization are alike wanting. Upon the ethical side the tragic weakness of the present school is that it endeavors to prepare future members of the social order in a medium in which the conditions of the social spirit are eminently wanting."

What more admirable short description of the social ideal of the internal organization of the school could be written than the last of these two paragraphs!

But how adequate, it must be asked, are the means proposed for carrying this out? Work in wood and metal, and the like, may sometimes be instrumental in this direction, but that depends entirely on who it is that realizes them as

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instrumentalities. Primitive people found them exceedingly important. They are also necessary functions of modern civilization. But although these social wholes of the past and the present have found such activities useful and necessary to the maintenance of their social efficiency, it does not follow that it would be a social advantage for every one to be able to work in wood, metal, or the preparation of food. Professor Dewey selects these activities partly because they are simple and partly because they are historical. In a group of a dozen children, weaving, for example, is proposed by the teacher. In the usual teacher's way he tries to get them interested. In discussions with them he plans the work and arranges for a certain division of labor among the dozen. They may see the interconnection in the various parts of the work, observe the economy in the division of labor proposed, and, on account of its simplicity, may grasp the wholeness of the product. If to understand the process of weaving as it is never done at present is the chief aim, this is accomplished. But if it is the creation of society, and not of Indian mats, which is the aim, it is to be observed that the children have no real responsibility in this respect. The boy who starts a restaurant in the George Junior Republic is responsible for its success or failure, because the project started with him; he may modify it at will, and he may fail. The children who are weaving mats under the direction of a teacher cannot fail. They may not succeed with the mats, and they may be disappointed as a result; but the responsibility is that of the teacher, and the success of the undertaking depends on his inspiration, on his judgment and sense. The teacher is always the leader, and the children are directed by him. They are not even voluntary followers. The groups are made by the teachers according to their judgment of the personnel and the number which is best. No pupils are free to leave. The freedom and spontaneity of that social organization of which Professor Dewey speaks cannot arise, as it does on the playground, where there is a free selection of leaders, strict division of labor necessary for the particular game, and exclusion of those who are superfluous, unwilling, or socially unattractive and inefficient. The "motive and cement" of social organization, if not wanting, is at least not cohesive enough to bind the children together should the teacher be removed. Despite the fact that a great many of Professor Dewey's theoretical statements seem to demand it, the work is not tested in its social aspects as a nurseryman tests his seedlings, to see if they can take care of themselves, and of their own organizing force overcome resistance and accomplish results in the same spirit which should be expected of them later on. Under these circumstances the gap between the school and life must still show itself. The "tragic weakness" of the school from the social standpoint of democracy may be carried to a higher plane, but it must still exist.

Professor Dewey analyzes admirably the working out of an impulse or interest, and shows that this means "running up against obstacles, becoming acquainted with materials, exercising ingenuity, patience, persistence, alertness; it of necessity involves discipline — ordering of power — and supplies knowledge. Take the example," he says, "of a little child who wants to make a box. If he stops short with the imagination or wish, he will certainly not get discipline.

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But when he attempts to realize his impulse, it is a question of making his idea definite, making it into a plan, of taking the right kind of wood, measuring the parts needed, giving them the necessary proportions, etc. There is involved the preparation of materials, — the sawing, planing, sand-papering, making all the edges and corners to fit. Knowledge of tools and processes is inevitable. If the child realizes his impulse and makes the box, there is plenty of opportunity to gain discipline and perseverance, to exercise effort in overcoming obstacles, and to attain as well a great deal of information."

How very true! But all on one condition, namely, that the child continues to want to make the box. At this point of voluntary control appear the really personal and social factors. If, in a misguided moment, a small child said he wanted to make a box, and found gradually unrolling before him not his idea of the making of a box but that of his teacher, who keeps him at it, the above general analysis, if applied to such a case, would need to be very materially modified.

Unfortunately Professor Dewey actually fits his analysis to just such a case. He goes on to say: "The little child who thinks he should like to cook has little idea of what it means or costs, or what it requires. It is simply a desire to 'mess around,' perhaps to imitate the activities of older people." But if this is so, would it not be well to find it out at the beginning, and if the child's real idea or plan shows no likelihood of enlarging in such a way as to be his permanent possession until the work he plans is finished, is it social or logical to substitute for this another plan of cooking which contains the meanings and requirements that the

teacher sees? The child may get discipline and knowledge out of this, but they are not the kind of discipline and knowledge which Professor Dewey seems to have had in mind when he wrote the analysis we have just quoted.

In the case we are citing, the cooking went on. "One of the children became impatient at having to work things out by a long method of experimentation and said: 'Why do we bother with this? Let's follow a recipe in a cook book.' The teacher asked the children where the recipe came from, and the conversation showed them that if they simply followed this they would not understand the reason for what they were doing. They were then quite willing to go on with the experimental work"!

To follow that work will give an illustration of just the point in question. "Their occupation happened that day to be the cooking of eggs, as making a transition from the cooking of vegetables to that of meats. In order to get a basis of comparison, they first summarized the constituent food elements in the vegetables, and made a preliminary comparison with those found in meat. Thus they found that the woody fiber or cellulose in vegetables corresponded to the connective tissue in meat, giving the element of force and structure. They found that starch and starchy products were characteristic of the vegetables, that mineral salts were found in both alike, and that there was fat in both, — a small quantity in vegetable food and a large amount in animal. They were prepared then to take up the study of albumen as the characteristic feature of animal food corresponding to starch in vegetables, and were ready to consider the conditions requisite for the proper treatment of albumen the eggs serving as the material of experiment."

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They went on to experiment quite successfully with the white of the egg, and at the end, as Professor Dewey says, "were prepared not simply to cook eggs, but to understand the principle involved in the cooking of eggs."

It is certainly not educative "for a child simply to desire to cook an egg and accordingly drop it into the water for three minutes, and take it out when he is told," as Professor Dewey says; and if the child did truly "realize his own impulse by recognizing the facts, materials, and conditions involved," and then continued to regulate his impulse through that recognition, it would be educative, as Professor Dewey says again. But who can think that this is what has been done? There is no proof or indication of it. The child's impulse and the child's real point of view were evidently lost sight of quite early in the proceeding. The children are said to have been willing to go on with the experimental work, but after the teacher's talk and her plainly implied attitude, what alternative was there? From a social point of view and as a social factor in the class, how much further on is such a teacher, except perhaps in tact and skill in carrying out a difficult proposition, than the teacher who outlines such work as she thinks can be done, and sees that the children do it, without bothering much about their immediate impulses, their spontaneous and inevitable social organization, or the natural development of their point of view? In both cases there is a social organization actively springing from the teacher, and in which the children take some part, but in neither case do the children stake themselves upon the issue and feel that truly voluntary and creative responsibility which is rewarded by nothing further than the success, and humiliated by nothing further than

the failure, of cherished plans. It is the constant presence of vital will and intention which is at the bottom of all genuine effort, and this, rather than a prearranged simplicity of material or occupation, gives the wholeness to any activity.

Where the children's deepest intention is to follow out the teacher's direction, to get into the spirit of it, to welcome the task that is set, we have, whether the work is in weaving or in algebra, a highly moral and indispensable factor in social education. Necessarily mingling with this, in various degrees according to the personality of the child, are factors of will which spring from more self-centered desires. Many children like such activities as weaving, for its own sake. The freedom of movement, the natural and unforced play of attention required, are quite enough to account for this, without the operation of formative social desires. But even small children also set themselves to much more difficult and even formal tasks, and maintain their intention until accomplishment crowns their effort. This intention is the background motive of their obedience to the teacher.

As an illustration of this I may quote the case, which is not at all unique, of a little five-year-old girl whose father read to her the story of Lamia from a book. She said nothing until years afterwards of the intention that was born of that experience, but it nevertheless controlled a large part of her life. She said that this was the first time she had noticed that people got their wonderful stories by reading. The thing haunted her and she set herself to the apparently formal task of learning to read. She went to a very poor school, submitted herself willingly to all the unskillful operations of a dull and inefficient

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teacher, and as a result accomplished her ambition in a comparatively short time.

There are some children, and perhaps more than is supposed, who look upon weaving, picking cotton, etc., as foolish, even when they do not get that attitude from the home. They are doubtless comparing these operations with some more revered and cherished plans of their own. These plans need to be discovered, fairly dealt with, brought out into the open, and, instead of being criticised out of existence, helped along their way. If they are seemingly formal, sympathetic inquiry will probably find a germ of reality out of which they have grown. Being founded in personal will, itself derived from previous social contact, they are the true starting points of further social organization which can be real and effective only in proportion as it carries out the original energy of those genuine and too often unexpressed desires.

To find the best possible course of study that can be organized by the teacher is a great work and of inestimable value to education. To this result Professor Dewey has given the world a notable contribution. He has seen, theoretically at least, that it is the course of study rather than the rest of the daily life, as in Abbotsholme, or the legal and economic conditions, as in the Junior Republic, which is the essential work of the school, and into which the spirit of democratic social service ought to be introduced.

But the best possible course of study, if organized by the teacher, gives us a teacher's tool rather than one for the children. No doubt every teacher's tool should be adapted to the children and to many of their instincts.

The children, moreover, ought not only to yield or receive, but to help in working the tool themselves. This is indeed truly social, so far as it goes. But in order to complete the social development needed for democracy, real leadership, which is, after all, the highest kind of social service, is necessary, as well as coöperative obedience. Its full limits and highest potentialities should be recognized in the school, and the children should, therefore, as true pragmatists themselves, be permitted or helped to make their own course of study, to some extent, at least, and to find or make such tools and social organizations as they themselves see to be necessary for the realization of their aims. In no other way can one be sure that the character and habits which we expect of them in life have really taken root and can maintain themselves when the children have left the school. When this is done, as an integral part of the school work, teachers may obtain not only a measurement of their own best efforts, but a better opportunity to study the children's social processes, and thus adapt the work, in which they as teachers are necessarily leaders and directors, to the social capacities of those with whom they deal.

In this short review of the Dewey School the reader may have noticed that the cases which Professor Dewey offers as illustrations show the mental mechanism of the individuals, as such, much better than the nature of the groups or the little societies of which they form a part. While it is absolutely necessary to an understanding of the general problem to obtain clear and detailed interpretations of the mental happenings and development occurring in typical children, it does not follow that this is

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enough, or indeed that it supplies the most important and controlling factor in the situation. Herbert Spencer seemed to be of the opinion that a calculus of the psychic traits of individuals would determine beforehand the nature of the groups which arise from their association, and this in spite of the fact that he claimed to regard society as prior to the individual. The truth is, as already stated, that neither is actually prior, and yet society as it exists at any one time is much less plastic and more compelling from a causal standpoint than the nature of the individuals which compose it.

In this respect, as Durkheim points out (4), there is something of a contrast between the biological organism and the organization of individuals called society. In the body the cell unit is, for the most part, permanent in place and hereditarily fixed in function. With the higher animals substitution of function among the different parts is very rare, and most apparent in the brain, which is the organ immediately subserving social action. The case is quite different in all highly developed societies. Here individuals move freely from one position to another, and constantly change their rôles, sometimes to a very great extent. For America especially, this feature is fundamental and characteristic. The successful mule driver of to-day may be the successful President of to-morrow. Every kind of equality of opportunity for each and all is, as we are never tired of saying, the presupposition and the aim of democracy.

Such interchange or development of social function is impossible without the greatest plasticity on the part of individuals. This plasticity, however, while it has a biological basis, is useful only as it is played upon by society.

Habits of social action, not so permanent that they may not be changed if occasion demands, must be formed and used in building up the structure of society. The social situation in which a person finds himself, or the group with which he is in contact, has thus the most to do with his rôle or function in society and his success in life. The family in which the average individual is brought up has usually even more to do with his serviceableness to society than the one in which he is born. No doubt the possibilities must be latent in the individual, but different groupings with quite similar material produce entirely different results.

If, then, we are to educate the children for democracy, it is the nature of the groups in which they work, the varying constitution and development of these, and the repercussion of them on the constituent individuals, which form the most important element in the process.

The group or society of which the teacher aims to be the leader and inspirer from a social standpoint is usually more or less of a mere aggregate, rather than an organization (5). There is every reason why the teacher should aim to organize this aggregate. In no other way can he become really the leader. When this is not done, the aggregate does not remain in a neutral condition. Organization sets in, independently of the teacher. It is not always fully conscious of itself, but it is none the less influential. Certain boys or girls are looked to by the others for guidance, and become centers of disturbance. They are watched by the others for indications as to how far the class as a whole may go in opposition to the teacher. Sometimes there are chiefs for war and chiefs for peace. When a teacher runs against such a chief, it is no longer an individual he is

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dealing with, and even when he finds fault with some humble member of the tribe, unless the chief consents to ignore or to condone the treatment given, the teacher may meet with as much difficulty and silent antagonism as if the individual had been socially important. The flag of the tribe protects its feeblest member.

Frequently more than one such group or clique can be found in a class, and although there may be some rivalry, there is usually a status quo. Those not in any group are left over, either as the teacher's pets, or as the offscouring of the class. When groups have once formed, the teacher who does not realize it is lost. His best resource is in some way to get hold of the leaders. In old-fashioned schools leadership was often determined by actual fighting (6). If the teacher "licked" the leader, he had the rest of the school. In modern city schools leadership is a good deal more subtile, and the appeal to force, by calling in the head master, or by physical punishment for offenses, is not very effective. The group still remains loyal, and treats the punishment as an act of war. This is just because such punishment is not at all a fight in which personal address and vigor have any part. The teacher, on the contrary, is merely calling in the organized force of the community of adults to which he belongs. This is known to be superior, to any form of frontal attack. Guerrilla warfare is all that is possible.

It is the impression of the present writer, due to a fairly wide experience of schools, both in the East and West, that at least fifty per cent of the higher-grade classes in the public schools are, to a greater or less extent, in such a state of antagonism to the teacher. This is not always

carried so far as to prevent a certain kind of work from being done. The teacher may be respected as one would respect an officer of an opposing army, but he is not in any real sense a leader. It is also to be noted that the members of the children's groups, taken individually, have usually nothing criminal or even unsocial about them. It is the group to which they belong, rather than their own personality, which determines their conduct. Such organizations, however, even when largely instinctive and unconscious, are a menace to the best interests of the children, who, no matter what their achievements may be in reading, writing, and arithmetic, are getting an education in hostility to many of the best things in society as a whole. In some way the teacher must creep into or break into this child community, if he is to lead it out of its narrowness and set it on the way to a higher development.

Sometimes the doors open by accident, and the teacher, if he realizes it, may enter naturally. A case told me by a distinguished Boston educator of his own experience when teacher of a ninth grade will illustrate this point. A case of discipline had arisen, and the teacher said to a certain boy, "Well, there is no doubt that I shall have to punish you." The boy replied in the presence of the class, "Oh, yes, punish me; you're always down on me." This touched the teacher, and, being human enough to flare up, he said impulsively: "I'll leave it to the rest if you don't deserve it. More than that, I'll leave the class entirely to itself in deciding. I'll turn my face to the wall, and they can vote without my seeing them, and I'll never ask a boy how he has voted." The vote was reported to the teacher as unanimously in favor of

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the boy's being punished. At this point the boy broke down completely, and through his tears said, "Well, it must be right, since everybody says so."

The interesting and significant feature of this experience is the effect of the class sentiment on the boy. His attitude of defiance in the first place was evidently conditioned by his thought that the class was back of him; and, indeed, so it might have been but for the action of the teacher. The case throws a strong light on the real nature of punishment. This is never the mere infliction of pain or other inconvenience. With a desirable social backing boys are proud of these signs of prowess. Although they may suffer, and sometimes give vent to the natural expression of their suffering, they are no more guided by this in their future action than is a martyr on the rack. Punishment is the disapproval and repression of the group one feels he belongs to. Nothing else is punishment. It may sometimes require a rite or ceremony like the administration of pain to make it understood and to show that it is serious, but it is the spirit of exclusion which is the reality back of this physical expression. Indeed the infliction of some more or less revengeful pain often has the effect of reconcilement. By this act the community still remains in contact with its recalcitrant member. It puts him in a position where his fellows observe him closely. He is the central figure of the tragedy. The others watch him and imagine how he is feeling. If he acts in such a way as to awaken sympathy, either by heroism or by more or less dignified humility and repentance, the hate of the community generally turns to a degree of admiration, and the punishment is over. Capital punishment, unless where the imagination carries

the drama into the next world, is thus the only form which is quite hopeless from this standpoint.

When a teacher administers punishment or reproof it is absolutely necessary that he carry with him the best sentiment of the class. He can do this on ordinary occasions, at least, only if the punishment be applied to prevent hindrances, not to such activities as the teacher thinks are desirable, but to those which the class can be made sincerely to approve. To get in sight of the solution of such a problem, no mere knowledge of individuals as such, or course of study, however excellent, will ever suffice. It is the social action of the class, the nature of the groups really at work, their aims and ideals, their leadership and organization, which the teacher must find an opportunity to study, and, if possible, to modify or control.

The most reasonable way out of the difficulties we have described would seem to be, not to hand over the strictly governmental functions to the children, although this may sometimes partially succeed, but to make some suitable opportunity in the regular work of the school for real leadership and organization on their part. If this phase of work is to exclude the use of force, it must find an opening into the course of study. It must not be relegated to off days, Friday afternoons, or to the home or the street, but must be represented on the time-table. As we have seen, the leadership of the antagonistic class groups does not depend much, in modern city schools at least, on the use of force. These groups are attractive enough to hold themselves together without it. If, now, we can bring out the leadership involved in these mistaken efforts of the children, and use the force at the disposal of the teacher to foster and

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protect the organizations that would be formed, the class would get a lively sense of the benefits springing from the teacher's power, and would be more disposed to admit its use on other occasions. The leaders themselves would get an opportunity for a full swing, and they would get this in the presence of the teacher, and with his approbation and consent. The teacher might, to some extent, become a follower in some groups, and offer advice and opinions which might not always be accepted by the leader.

Indeed, if this did not sometimes happen, two alternatives would arise. Either the teacher would stand off and merely observe at a distance the operations of the group, or there would be a feeling on the part of the children that the teacher after all was the real leader of the group. Both of these alternatives would be fatal to this phase of education. The teacher needs to get into the groups as much as possible, but by no means as an authoritative leader or organizer. His advice must have no more weight than its evident good sense and its capability of furthering the real interests of the children will afford. When the class reverts to the previous condition of affairs, and when the teacher becomes again the director, he will have an entirely different community to deal with. Not only will he have discovered some of the natural leaders (and who they are may often be a surprise to him), but he will have been able to learn a good deal about how the followers are influenced. Best of all, he will be regarded by the leaders as one of themselves. If he is broad enough to allow his newly acquired experience to modify his old habits, they will be disposed to study his methods of leadership rather than to continue to waste energy in warfare. They remain conscious of the

power within them, which is shortly again to have opportunity for exercise and display. Under such conditions the latent, underground kind of organization may find a normal outlet, an opportunity to become more conscious and progressive, and at the same time it may provide the teacher with a natural opening into the heart of the children's social life.

As will be seen, it is not a revolutionary or radical change of all school procedure which the introduction of self-organized purpose groups would bring about. Such a change means rather a conservation and development of the educational values that are already to be found in the real leadership of the teacher, although leadership on the part of many of the students would also be made possible.

It might be asked, though hardly by practical people, why, if a given attitude or relationship between pupil and teacher is a good and social thing for one part of the day, something different is needed for another. Or, if a teacher can catch the spirit of true leadership which makes room for all the children as active and constructive followers, why he should not continue to lead throughout. This true leadership is of course excellent, but it will come much more surely and naturally as a result of the observation of children's independent groups than it ever can without them. For the very lowest grades, however, such an attitude is probably all that can be expected. But, as we have already tried to show, the true constructive power of a follower cannot be measured when he is under the direction of another, nor is it to be expected in a democratic society that leadership should be confined to one or a few. We often hear that he who would command must first

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learn to obey. Nothing could be truer, except its converse, that he who would obey in spirit and in truth must also know how to command. There is no individual in a democratic community who has not found it necessary, on occasion, to direct others. This direction may not apply to many at a time, and it may not be for long, but when the opportunity comes much more depends upon his action than when he played a follower's rôle. At present our society suffers more from the lack of true leadership, and the kind of insight and morality necessary for such a function, than from any other fault. The leader is so scarce that an undue premium is placed upon him. This shows itself strikingly in commerce as in politics, where the wage of even blundering leaders forms an enormous tax upon the community.

With greater practical experience and insight into what leadership really means, we may hope to produce more competent leaders to select from and more intelligent followers to select them. Besides being a test and measure of the capacity of the social work of the teacher to live and maintain itself when his direction is removed, the self-organized group ought to afford a direct means of education designed to touch the democratic problem at the point of its culminating service to the community at large,

REFERENCES

- 1. John Dewey, The School and Society.
- 2. Cf. Hermann Post, Der Ursprung des Rechts, 1876.
- 3. Dewey, op. cit., p. 29.
- 4. Emile Durkheim, De la division du travail social, p. 367 seq.
- 5. F. H. Giddings, Principles of Sociology.
- 6. Cf. The Hoosier Schoolmaster.

CHAPTER VI

SELF-ORGANIZED GROUP WORK

The reader has now before him some of the social needs which free, self-organized work would go far toward satisfying. In each of the three schools studied in the previous chapters, we found elements of a high degree of social value, and an approximate solution of the problem of educative social organization. Space prevents us from studying other schools in detail, although one of them at least, the Ethical Culture School of New York, founded by Felix Adler, has arrived under Mr. Manny, its recent superintendent, at a high degree of social efficiency, and would amply repay investigation. We must, however, hurry on to the problem of the average grade school of the times, and attempt to show how it is possible, even with crowded classes and without special equipment, to obtain in the people's schools those cooperative and self-sustaining motives which are worthy of democracy and best able to measure the teacher's work.

The experiences to be described may be called experiments, but not in the sense that they were instituted merely to see how they would turn out. They were experiments simply in the sense that all life is experimental, and were devised with the view that the development of intention and resourcefulness on the part of the pupil is the greatest and most undeniable duty of any form of education. They

are not, however, the outcome of any particular a priori theory of either individual or social action, and they have, therefore, the character of scientific data, from which useful generalizations may be made, capable of carrying both thought and practice into larger fields. The naturalness of the data is shown by the fact that in different schools, and in the same schools from year to year, a given piece of work is never repeated. As some one has said, "Constant change is the unchanging law of humanity." Different conditions and different children always produced different results. There was nothing to justify any expectation that we should ever be able to obtain by our experiments an ideal course of study capable of being handed over to other schools. There was no hope that we should ever be able to stereotype the results in text-books and fix them upon the brains of a rising generation.

The experiments naturally start from a background of dictated work derived from the usual course of study, and it was always a condition that no work was to be permitted, the plan of which the teacher did not approve; although after it was started it might fail or succeed without the teacher's stepping in to bolster it up or to coerce its supporters. There never was any likelihood that in the lowest grades, at least, the children's self-organized work would absorb the whole of the school work or all the time on the programme. Dictated work which the teacher leads directly, and courses of study, however much they may be modified, will always be needed to some extent in the education of the young.

Several years ago the present writer, in coöperation with two third-grade teachers in the Chicago and Cook County

Normal School (Miss Margaret McIntyre and Miss Jessie Black) introduced the proposition of self-organized work to their pupils. Each teacher said to her class, with as much simplicity as was possible, something like the following: "If you had time given to you for something that you enjoy doing, and that you think worth while, what should you choose to do? When you have decided how you would spend the time, come and tell me about your plan. You may come all together, or in groups, or each by himself; but whatever you say you want to do, you must tell the length of time you will need to finish it, and how you expect to do it."

We thus called for a plan as definite as possible, both as to time and materials. It was understood that if the teacher could not be convinced that the plan was feasible, or that it was sufficiently worth while, she would not allow it to begin.

At first in one class there was but a single plan. This started with three boys, eight or nine years of age, who said they wanted to print. "How can you print?" the teacher asked. "We have no printing press." "Oh, yes; Harry here (the real names are not used) has a press that his father gave him at Christmas, and if you will let us, we'll print a list of those hard words, the names of the days of the week, which you gave the class to spell. We will place a copy on the desk of every pupil, and you will see how quickly they will learn them." "How long will it take you?" the teacher inquired. "Three, or perhaps four half-hours. We can divide up the work so that we think we can get it done in that time."

The teacher gave the period from 11.30 to 12 on Monday, Wednesday, and Friday. They chose the back of the room to work in, and they agreed to be as quiet as possible

so as not to disturb the rest of the class, which meanwhile was doing such work as the boys could best afford to miss. They succeeded admirably, and completed their work within the time specified. When they were fairly at work the rest of the class woke up, and the teacher was presented with a number of plans, many of them of a very mushroom character, devised mainly to escape the regular work of that hour. But when the teacher asked in detail about the plans, how long they would take to finish, etc., these latter were spontaneously given up by the children, or enlarged so that they became more practical. After the printing group had finished their first contract, they still kept together with the idea of becoming class printers when needed.

In the other third-grade class a similar group was started, which soon took in more boys who wanted to join. On one occasion the teacher found that they were not doing what they had planned for that day. She asked them what was the matter, and pointed out that if they did not do what they said they would, they would have to go back to their seats. They had a little consultation among themselves, and decided that there were too many in the group for the work to be done, and that they interfered with one another instead of helping. The group was thinned by its own action, and the work was finished successfully. This group also kept on for some time, and printed a number of things for the class. Here is a sample of their work.

Criticism of Report of Group 2 on Beef Tea. The Group did not know all they should know about it,

It was worth giving

Some time after the beginning of these groups, and when nearly the whole class was engaged in one or another of them, Professor Albion Small paid them a visit. One of the boys said to him: "Look at those girls cooking. Now I don't see the good of that. But this work is just the thing for me. I am a very poor speller, and every word I set up I learn to spell." This group interested some of the families from which the boys came, for they were never tired of talking of it at home. One of the fathers, although a working man, contributed fonts of type to the value of \$15. Pieces of work were taken home, and their merits and defects fully criticised. These printing groups had a leader, although he was not given any special name.

In one class three cooking groups were started. The first of these was started to cook - "just to eat," as one of the members stated. It was at first composed of four girls and one boy. The initial preparations required a good deal of management. The mothers had to be persuaded to give money or material. One girl brought an old gas oven, and another a heater on which it was placed; also a table had to be provided, and shelves for dishes. An attachment had to be made in order to use the gas. For this the permission of the principal of the school was required, and how best to approach him was carefully considered by the group. Books of recipes were obtained, and although the reading was difficult for third-grade pupils, much reading was done and the merits of different recipes were discussed. A cake was finally decided upon. I was called in as a guest when the cake was finished, and since it was a sacrament of friendship, I did my best to eat my piece. As we were sitting around, the boy said between his mouthfuls, "It seems to

me this cake ain't as good as it ought to be." "What's the matter with it?" was the rather sharp retort of the little girl who was the leader of the group. The boy, who was phlegmatic, replied without a ruffle, "Well, maybe it's the butter; it might have been butterine." "You bought the butter," said the little girl. The boy said nothing, but later he went to the grocery store where he had bought it, and asked if it was butterine. The grocer, probably vexed, said among other things, "If you don't like the butter, perhaps you'd better write to the Health Department." When the boy came back to school, he asked the teacher, "What is the Health Department, and what did the man mean by saying I'd better write?" The teacher told him, and said that perhaps it would be a good thing to write.

This he did, and got back a sheaf of pamphlets. Most of them were too difficult for him, but in one was a marked passage telling how to test for butterine by noting the rate of melting. The whole group were so interested in this that they stopped cooking and started in on the test for butterine. They were quite successful, and they used the test on several occasions afterwards.

By this time they had decided to keep all the recipes they used, and each made a cookbook for his or her own use. They obtained rubber stamps and "printed" these recipes, and although it became somewhat like drudgery later on, they insisted that no member of the group should shirk that part of the work. The experiment with the butterine was also printed in their cookbooks. This is the way it ran (grams were used because the children could get no other weights in the school. The directions called simply for equal weights):

EXPERIMENT WITH BUTTERINE

5 grams butterine melted in 66 seconds.

5 grams butter melted in 60 seconds.

5 grams lard melted in 39 seconds.

5 grams of tallow melted in 629 seconds.

Test for butterine. Butterine smells bad when it melts because it has tallow and lard in it.

It sputters when it melts because it has tallow in it. It melts slower than butter.

Meantime, the children had seen in a window a man binding books, and they thought that it would be a good plan to have their cookbooks bound. They visited the bookbinder, and he showed them how to stitch the leaves together and make a stiff cover. As a consequence they all bound their books, an art which was copied by some of the other groups that needed it.

After several experiments in cooking, the necessity of having their plans made the night before, so that every one would know what to bring for the next day, was seen to be so important that the group decided to have a chairman, whose duty it would be to see that this was done. The original leader was, without debate, made chairman. The term "chairman" was attractive, and was copied by some of the other groups, but in a few cases, after being used, it was discarded, the children saying: "What do we want a chairman for? Every one knows what to do, anyway." In the cooking group, however, the chairman was a necessity.

The third or fourth thing that they wanted to cook was Charlotte Russe. When the group assembled there were no lady fingers. These were to have been brought by the boy. Since the cooking could not be carried on that day,

the children had to go back to their seats and do some work which the teacher outlined for them. They were very much vexed at the boy and talked of asking him to leave the group. The boy said, however, that the fault was not his, but his mother's. His mother had told him that she was tired of giving him money all the time.

The group then went to the teacher about the mother problem. They wanted her to write to the mothers and say that they were to send the things the children asked for. The teacher did not look at the question in this light, and said she did not think that she could write to the mothers, since the group work was their own affair in which they must depend upon themselves. They talked the matter over again, and the chairman finally said: "Well, it wasn't Harold's fault. It never would have happened if we hadn't let Harold bring so many things that cost money. For all the things we have cooked he has brought more than any of the rest of us. What we want to do is to get it evened up. Then those who can't bring money can bring eggs or butter or sugar, but no one should have to bring more than his share."

They perceived very clearly what they wanted, but they did not see the means by which it was to be accomplished. So they went to the teacher with the difficulty. "The recipes," they said, "give things by cupfuls or spoonfuls, while these same things are bought by the pound." The teacher pointed out to them that they could get, for instance, a pound of sugar and find how many cupfuls were in it, and then divide the cost of the pound by the number of cupfuls. This idea they grasped at once. But after they had got the cost of material by the cupful, they did

not see how it could be divided evenly among the pupils. The teacher again showed them the simple averaging that was necessary, and although averaging is not usually introduced into third grades and they were never shown again, they used this method constantly and without errors throughout the rest of their work. The plan of the chairman to meet the mother problem turned out to be quite successful.

This cooking group, as it was first formed, was very harmonious, and the resistance that they had to overcome was almost wholly from the outside. It was the introduction of a new member which started friction and gave rise to internal resistances which for a time hampered the success of the work. A new pupil appeared in the grade, and as she was a merry, black-eyed little thing with attractive ways, she had an invitation to join from every one of the groups then organized. Of all these invitations she accepted the one from the group that were cooking "just to eat."

It was not long before trouble appeared. Bessy was constantly forgetting things. The chairman mothered her, pinning slips of paper on her coat to remind her, etc., all to no purpose. She would lick cream off spoons, refuse to wash dishes, etc., and, since the group were now in a little room by themselves, would act noisily, so that the rest of the group were afraid that their privileges might be withdrawn. At last they came to the teacher and complained, asking her to put Bessy out of the group. The teacher said: "I did not invite her, you know, to join your group; but I am very willing to do what I can. Just now, however, I have a meeting, and you'll have to wait here an

hour till I return; then we can talk it all over." When she came back the children were gone, but on her desk was a note asking her to give the following papers, one from each member of the group, to Bessy.

I think Bessy talks too much and I think she plays round the room too much, and I think she makes too much noise. Bessy did not bring her things while the others did to cook with. And she did not stay to print at nights after school only once or twice. She would not help wash the dishes. Then we told her we would put her out if she did not do the work, and we thought we could do better without her. Then she brought her things and helped wash the dishes, but she quarreled so.— L.

I think that Bessy ought to get out of the group because she wants everything. — Harold.

Bessy plays tag and she says, "This is mine, this is mine." And she is always fussing all the time. I think she ought to be put out of the group. — M.

I think we could get along better in the group without Bessy because she talks too much. And disturbs us too much and we can't do so much work. And she wants to do all the work and no one else to do any of the work; she wants to do all the cooking. I think she should be put out. — M.

Bessy plays tag when we are cooking and she is too fussy, and I think she talks too much and too loud and she is too noisy and she is always fussing and quarreling with the other children, and I think she ought to be put out of the group. — B.

I think Bessy should be put out of the group because she does not help in printing and when we cook she quarrels with us. — S.

The papers were handed to Bessy as the children had requested. After reading them she took up her pen and wrote the following reply, in which it will be noted the beginning does not hang very well with the admissions at the end.

Well, what I think about it. I have always brought the things they told me to bring and when they told me to print I have always

done it. And to the other school we would talk so loud and I am so used to it. If they put me back again I would do lots better than I did before and I would bring the things they would tell me to and I would bring everything when they told me to and I would do everything.

They did not, however, take her back, nor was she ever invited into any other group while she remained in the school, a fact which did not seem to depress her in the least. Her family moved again before the end of the term, and Bessy departed with them.

The teacher asked the children why they had written the papers. The chairman replied that if one person told Bessy that the group didn't want her any more, she would be mad with that person (who probably would have been the chairman), and more than that, she might cry; while now there was no one in particular to be mad at, and if she wanted to cry, she could cry by herself.

To the student of government it is interesting to see how the children went to the teacher when it was a matter probably involving force. They wished to use the policeman power of the teacher to insure Bessy's removal. This, in case of any refusal on her part to leave, would naturally have been exercised. In the same way a clergyman or member of a church who is voted out is compelled to respect this decision by force of law if in no other way. The law, however, stands outside of the organization itself.

The method of writing on serious occasions was copied by some of the other groups. The following papers from another working group indicate a happier termination.

1. Mildred as chairman. Mildred is not chairman and she wants to boss everything. I like her, but I do not want her to do everything. — L.

2. What we think about Mildred. I think that Mildred is too bossy. I think that we ought to write to her and tell her what we think. She made a good chairman whether she bossed us or not, but she bossed us too much. — S.

Mildred replies as follows:

I think that what Sarah and Lila said was all right. I think that we will get along all right now and a good deal better. I think that the money is fixed. I think that we are going to have a better group.

There was no doubt that Mildred had been bossy. We wondered indeed that the children had stood it so long. After this for a week Mildred was a marvel of self-control, but it wore on her and she persuaded her comrades to take turns in the chairmanship. Neither of them, however, had anything like the natural executive ability of Mildred, and they did not succeed so well. Nevertheless Mildred made no comment. When it was her turn again, the others asked her to be chairman all the time, and to this she consented. She at times broke out in the old ways, but the others bore with it, and she herself was evidently anxious to improve in this respect. It can hardly be doubted that all the members of the group had in this experience a reallesson in ethics much more practical and persuasive than any formal instruction.

The third cooking group in this room was composed wholly of boys. They said: "We don't want to cook as these girls do. But if any one should be sick in the house, then we should like to be able to cook something." In accordance with this, the first thing they attempted to cook was beef tea. They inquired into everything that made the beef tea nutritious. They were told that it should not look gray when it was done, as that shows that the albumen in the meat, which is of the same substance as the white of

an egg, has become hardened and cannot be digested so quickly. They beat out of pieces of the meat some of the juice and compared it with the white of an egg at the teacher's suggestion. They were perfectly free, however, not to do this if they had not wished to. This group did not last so long as the others, but broke up voluntarily, the boys joining other groups formed for other purposes.

During the year this class formed only fourteen groups. Among them were a photograph group, a group for modeling in clay, two sewing groups, two science groups, one printing group, and two groups for plays. The work of these groups was usually carried forward to a considerable degree of success.

The photographic group was composed of several boys. They fitted up a closet as a dark room. They were always looking for information on photography, and teachers often brought them books and pamphlets. To some extent they were photographers for the class, and they took photographs of some of the plays and made lantern slides for them. After they had been at work for several weeks the rest of the class wanted them to tell something of their work. The group were a little doubtful about the capacity of the others to understand, but the leader thought of something which he believed would help in this respect. During the period for group work he fitted up his camera and focused it on some buildings opposite. He then called out, one after another, each member of the class, made him put his head under the cloth, and asked him, "What do you see?" "I see the buildings upside down." "Do you want to know why it's like that? If you do, we're going to show you next time."

This they did, explaining how the rays of light cross one another in the lens. The boys of this group kept a record of their work, and, as with the cooking group, bound it in a book. One of the boys made a small pinhole camera, which, without any lens, took some very fair photographs.

One of the plays given in this room was The Sleeping Beauty. There was no dramatic version of this tale that the children knew of. They brought to school all the different editions of the story they could find, and started to turn it into dramatic form. This they did by arranging the cast first. "You may be the prince, and you the queen," etc. The members of the cast then began to extemporize the words. The action was thus first thought of. As they went on rehearsing, different members of the group would criticise the words used, saying, "That doesn't sound right." They avoided using big words or hard phrases from the book. They divided the story into scenes, made the costumes, and strung a curtain on a wire in front of the teacher's desk. They used the blackboard as scenery, drawing on it the castle seen through a forest. To bring this in, a scene was invented which consisted of the prince inquiring of two countrymen his way to the castle. It was not until after the play had been nearly fixed in its final form that they began to write it down. By this time there were changes suggested and accepted about which a dispute would sometimes arise afterwards, but one of the main reasons for writing was pride in the play. One of the boys of this group was very desirous of learning typewriting. He brought an old machine to school, and, among other things, made a typewritten copy of the play, which ran as follows:

The Play

of

THE SLEEPING BEAUTY

Written by

M. W.

Given by Grade 3B.

Scene I.

1st Fairy. "

"I give you beauty."
"I give you the gift of dancing beautifully."

3rd Fairy.

"I give you the gift of being a good cook."

4th Fairy. 5th Fairy.

"I give you the gift of good health."

•

"I give you the gift of playing well on the harp."

Wicked Fairy.

"Your daughter will grow to be 15 years old and then will prick her hand with a spindle and die of the wound."

Good Fairy.

"She shall not die. She shall only sleep for a hundred years."

(Fairies go out.)

Scene II.

(The princess goes into the tower room.)

Princess. Marjorie F.

"What are you doing?"

Old woman. Helen.

"I am spinning, my dear."

Princess.

"Let me try."

Old woman.

"All right, my dear."

(Princess pricks her hand. She falls asleep. All the people in the castle fall asleep.)

Scene III.

(Prince comes near the castle.)

Prince to a man.

"What kind of castle is that?"

Old man.

"It is the castle of a monarch."

2nd man.

"It is an enchanted castle. A long time ago a princess fell asleep in that castle. She was to sleep for a hundred years. She is sleeping there now."

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(Prince cuts his way thru the hedge of thorns. He goes thru the castle, sees the people asleep. He goes into tower room, sees princess asleep, kneels beside her and kisses her hand.)

Scene IIII.

(The princess wakes up. Prince leads her to the King and Queen. All the people in the castle come and dance around the King and Queen.)

This play created great interest in the homes, and the teacher was surprised to receive many requests from the mothers and other members of the family for permission to see it when it was presented. This, of course, was granted, and the simplicity of the play, with all the earmarks of genuine child production, was thoroughly appreciated by the audience.

The attitude of the teachers with relation to this play was the same as in the other groups. I may perhaps call myself one of the teachers, for I came into the room very frequently while the children were rehearsing. I used to think over what I had seen the day before, and see if I could add anything or offer any suggestion that the children would take up. Sometimes the children would say, "That's right; let's do it that way," but at other times they would shake their heads and say No. It was at first a little disconcerting to be overruled, especially in matters where I was quite sure I was artistically correct; but I was consoled by the reflection that only those criticisms which they freely and voluntarily accepted were the ones which entirely suited their stage of development, and when they rejected modifications of my proposing I saw that ethically, if not artistically, they were right. I felt that they were

standing on their own feet with perfect honesty of conviction. Indeed, until they refused to do something which I had recommended, I was never quite sure that they were really independent. I knew, too, that it was a better example, to their minds, of real service to them than if I had insisted on my proposals.

To come in contact with realities in a child is the most attractive thing about teaching. It is these realities which we admire in children, and which afford the greatest pleasure to parents in their contact with them. In schools of the usual sort most of this naïve originality is overruled and crushed. It is feared that it may lead to lack of discipline, and, moreover, where the initiative flows continuously from the teacher, there is little room for it, and it comes out accidentally, if at all. The teacher thus robs himself of a great part of the pleasure of his work, becomes formal, "teachery," and at the same time blinds himself to the real capacities of the children.

The time which was at first allowed for this work was, as already said, three half-hours a week, but after a short time many of the groups began to say to the teacher that they wished they could have more time. They were sure that they could do a great deal better if the time were extended. The teacher replied that she was not sure that every group could use the time well, and since it was a matter that concerned the whole class, she could not extend the time unless she was sure of this. The children used part of their group-work time to discuss this, and convinced the teacher that all would be benefited. She accordingly extended the time, at first two half-hour periods, and later on, after further requests, to three quarters of an hour

per day. This contented the children of this age completely. Their power to plan seemed to be entirely used, and after this they never asked to have more time. The teacher noticed also that they were better satisfied to be carried along by her in work of her planning during the rest of the day than ever they had been before.

From my experience with six third-grade classes I can say that no class ever asked for more time than an hour a day. These experiences thus show with a certain degree of conclusiveness that there is a distinct limit beyond which the children are not able to go. Whether it would always be best to go so far as this limit is not asserted. In the case cited it seemed, in view of the best interests and total work of the class, the wisest thing to do. The teacher constantly kept in mind the detail problems of her grade, particularly reading, writing, and arithmetic. Many of the groups directly promoted interest and progress in the routine subjects, so that the class made as good an advance along these lines as any class had previously done. Leaving aside the higher concerns of character, resourcefulness, and social organization, the teacher felt that, from the lower standpoint of subject-matter alone, the time allowed was amply justified.

In this class there were four children who were never in any group. They did not desire to join any, and the teacher gave them work to do by themselves. They were all physically rather inert, and were always pleased to do as well as they could anything that the teacher directed.

In the other class, during this year, instead of fourteen groups there were thirty-eight formed, and there was no child who was not in one or more of these groups. This was in a class of fifty children, so that the percentage of

leadership was high, probably over sixty per cent, — if we allow for some who were leaders of more than one group. When such a result is possible with children eight or nine years old the outlook for democracy is good. Each child was in six or seven groups during the year, and there were usually about seven groups running at the same time. The teacher did not find these too many to keep in contact with, although there was some difficulty in getting time for consultation during the planning of each group and before it was started. The teacher pointed out this fact to the children, and it was proposed to put the plans in writing so that the teacher could read them at some other period. There was the advantage of definiteness in the writing, although children of this age only wrote the salient points, and verbal discussion was also necessary.

These thirty-eight groups produced twenty-one plays and playlike representations in which the children themselves took the parts, and five plays in which dolls, toy soldiers, or figures made out of paper and wood were used as actors. In the latter class there were three battles, The Battle of Bunker Hill, The Battle of Manila, and The Battle of Thermopylæ. The other two were girls' plays, - representing dolls of different countries, and the story of Bopeep. This classic was played with a box for a theater, the sheep being provided with tails which came off easily. In the former class there was only one battle, that of San Juan Hill; but other representations, such as The Indian and the Hunter, The Wild West, and The Firemen, had a good deal of the fighting element in them. It may be pointed out that this element in a play, while it probably springs from the fighting instinct, serves as a radiation and control for it. The boy gets the opportunity of seeing different sides. His imagination is appealed to rather than any real emotion of anger. He adopts the heroic attitude, which is chivalrous and knightly rather than bloodthirsty. The emotions of injury which are characteristic of the origin of war are really dissipated.

Besides plays and representations, there were groups for clay modeling, for reading stories, for painting, for sewing, for cooking, for the observation of ants, for the study of birds, for printing, for woodcutting, for dancing, for room decoration, for making a "Spring book," for the study of the rules of baseball, for collecting postage stamps, for running a post office, etc. Other plays not yet mentioned were Snow White, Beauty and the Beast, Three Bears, Dear my Soul, Decoration Day, Six Years and Six Fairies, Shepherd watching his Flocks, Cinderella, Red Riding Hood, Farmers, Policemen, Yachtsmen, etc.

In the latter the group were yachtsmen, and made use of the blackboard, on which they drew first a deck and a mast, then, under orders from the captain, ran up rapidly in chalk a huge white sail. Each was at his post, one at the compass, another at the wheel. Land was sighted through an extemporized pair of binoculars. Sail was lowered and the anchor cast, after which the sailors went ashore.

The Firemen was divided into three scenes. First, the firemen were represented in their everyday routine, — getting up in the morning, athletic exercise, etc. Next a fire drill was given. Then there was a call to a fire. When the fire engine and hook and ladder wagon came in, — represented by small express wagons with ladders, etc., on them, — the

fire could not be seen. The engine was attached, however, with real rubber hose (from the garden) to a big hydrant drawn on the board at the side of the room. The board at the front of the room was covered with a large cloth. This was suddenly twitched down, and we saw a house in flames. These had been drawn with red and yellow chalk. The firemen got to work, making swishing sounds to represent the play of water. Some climbed up the side of the house on ladders, and with blackboard erasers put out the flames that were pouring from the windows. Meanwhile other blackboard erasers which had been put up to represent bricks were tumbling about the ears of the heroes. When the fire was put out the engine was detached, some remarks were made about the fire, and the squad retired in good order.

In getting up this play nothing was written, but a good deal of fresh information was obtained. The boys visited a fire station, and hearing that one of the Normal students was a daughter of a fireman, wrote her a note, sending it through the post-office group, asking if she would come to them for half an hour. She did this, and found that they not only listened eagerly to all she had to tell them, but cross-questioned her to get the information they wanted. It is evident that a method which leads the children instead of the teacher to ask questions, although neither Socratic nor Herbartian, would be desirable in any work of the school. The subject-matter, too, is of a kind to give the children a little understanding of the social services of the city in which they live.

Another of the plays which was not written, but which was original and carefully planned out, was *The Indian and the Hunter*. In this play two boys who were the only actors,

as well as the authors, simply talked the matter over, and in a couple of days were ready to come before the class. Their presentation ran as follows.

All the blackboards in the room were covered with chalk drawings of trees. At one end of the room was a large figure of a fox which had been painted for them by one of the practice teachers. At the beginning of the play they pulled down the blinds and announced to the audience that this was the woods. The hunter, appropriately dressed, came in at one of the doors at the back of the room, and walked through among the desks, which represented trees. He had his gun under his arm, and was evidently looking for game. He occasionally caught sight of the fox and raised his gun; but it either seemed too far or got away from him. About this time, at another of the doors in the back of the room, an Indian was seen to skulk along, hiding behind the trees. After a little while the hunter came across a toy revolver lying on the ground. He picked it up, and, speaking for the first time, said to himself: "What's this? Some one has been here." He pocketed the revolver, went on cautiously, and found an arrow. "An Indian has been here." He went on much more carefully than before, this time up to the teacher's desk. When he came across the fox, and was just about to shoot it, an arrow whizzed by his ear. He turned around, and saw immediately advancing upon him the Indian with upraised club (a baseball bat). He let fly the discharge (a piece of chalk) intended for the fox, directly at the Indian, who fell heavily to the ground. This was the end of the play, but in a little while the Indian got up and walked away. The rest of the children criticised this, asking whether or not the Indian was supposed to come to life again.

The rumor of this play reached the children of the first grade, who sent up a request that it might be repeated for their benefit. The boy who played the Indian then came and told the teacher that he thought they should change the play somewhat, since they were going to give it to first-grade pupils. "No doubt Indians had to be killed," said he, "but first-graders would not be able to understand that"; and he proposed therefore to adapt this portion of the play to their moral perceptions. The play was thus amended by making the hunter merely wound the Indian, and afterwards come up and dress his wound, after which they shook hands and went home together.

The moral and social effect of the organization of the groups, rather than the artistic perfection of the plays, is of course the first concern. In illustration of some of the effects on individual character, one or two experiences may be cited. There was a boy of great imagination, who had no difficulty in projecting any number of ideas, but who found carrying them out quite another matter. In the ordinary class-room work under the teacher his hand was always up, whether his answer was very much to the point or not. No ignoring or snubbing made any difference. It was felt by the teachers that he was given to "showing off." When self-organized group work started he was the originator of several groups. He left some of them, and was put out of others without ceremony. The formula in one group was, "Jack, you're fired; you talk too much and do nothing." To this he did not even answer, but turned on his heel and went off. At last he could get no one to join him in anything that he proposed, nor was he included in any other group. After a while he cultivated the friendship

of a rather awkward and quiet boy who had just come to the school. It turned out that he was impressing him with the merits of a grand play that he had in his mind. The steadiness of this boy was sufficient to enable them in combination to get others, and the play was finally started.

Jack always hated to write. He would say he knew the play and didn't need to put it down. "Yes, you do," his friend would say; "because first you tell us one thing and then you tell us another." The result was that he did write, quite elaborately, first the story of the play and afterwards the dramatized version. In the play, between the two parts, came a full representation of the parade. The following is the story form:

Part 1

Decoration Day. It was in spring. One day the farmer came out of the barn and said to Bub his little boy about eight years old, help me with the horse because I am in a hurry for we are going to the parade this morning? The boy said, "All write pa," and he hitched the horse to the carriage. "May we take our dog Bruno with us he can sit on my lap." "No, we will leave him at home for I heard that some thieves got in Mr. Smith's house acrost the rood and we better leave him at home to watch the house." After a little bit the mother of the boy calls him to come in and get cleaned up ready for the parade, the boy goes whistling to the house Bruno beging (beginning) to whine "Nice dog, Good doggy" cried Bub. Then all the people came out and soon they were spinning down the road. There was a shout and down the road came the procession. They went ridding around awhile until it was about 8 o'clock, then they started home.

PART 2

When they got home they heard the dog barking. Then they saw a man with a lantern run past the door. Mr. Blake cried "Thieves! they wont be there very long any how. Bub get my revolver out in the barn." There was very much noise and shouting. One thief was wounded and the other ascaped. The people were very restless that

night. Mr. Blake was more restless than the other people in the night. Bub called his mother and said "I think I hear that burglar." She said "Your only dreaming go to sleep."

School will be let out while the people are sleeping.

There will be a boy with a blanket over him for bruno. Mr. Blake is the father of bub. Some one will explain about the house and the other things.

In presenting the play made from this story Jack managed it very well. Later the teachers heard an informal conversation which ran as follows: "Say, Jack's play was all right. He's been fired from the group so often the boys didn't think he'd have control enough." F—— said: "Yes, you think it was fine; but he didn't have control as much as you think. He'd say, 'Bub, go and clean up,' and we didn't know where to go." "Never you mind," said G——, "it was the best play we had."

The effect of this experience on Jack was very marked; both the neglect he suffered at first, and his later reëstablishment in the esteem and honor of the class, were most salutary. His father spoke of it specially to the teacher, and said it had affected his home conduct also. To any one who sees that moral conduct is but the subjective side of service to society, these results will not appear at all strange. The ugly outcome of free action which was not responsible to any one whose opinion he deeply cared for, had been changed to conduct in which he felt that he was responsible to the public opinion of his peers, — a democratic situation in which honor feelings flow between those on a similar social level.

As is easily seen, the social force in each little group ran out readily to the whole class, and tended to extend

itself to the rest of the school and to the home. Although there was not always a direct recognition on the part of each group that they were working for the whole class, this was usually felt. In the plays it was intended from the beginning that they were to be offered to the class. When the first play was judged by the group running it to be as good as they could make it, the question of presenting it to the class was brought before the teacher. She said that she could not give time on the programme beyond what she had already given for group work, and therefore they would need to ask the rest of the class whether they wanted to give up the various things they were doing in order to hear the play. The group went before the class and told them that the play would take but ten minutes, and asked them if they cared to hear it enough to give up their own work. This was done, and some time was added on to discuss the play and ask questions about it.

The result of other work besides plays was also brought before the class. Some of the children who were not in the printing group were interested in the subject, and they asked the group to come before the class and explain the process to them. A number of questions were asked, among which the teacher wrote down twenty-seven.

- 1. Who printed first, or did people always print?
- 2. Who printed the first book?
- 3. How are different presses worked?
- 4. What force is used to make large presses work?
- 5. Show us how you work your little press.
- 6. How are printing presses made?
- 7. Why isn't printed stuff sold right away instead of being stored in rooms as I've seen it?

- 8. What different-colored inks do printers use, and what are they made of?
- 9. Do you use different-colored inks?
- 10. Did you print Alice's story (written by one of the children)?
- 11. How do Chinese people print?
- 12. Can you use the little printing press as well as the big ones in the store? I want to buy one.
- 13. What different types are used?
- 14. Are they all made of the same stuff?
- 15. Why are rubber type, lead type, and steel type all used?
- 16. Why can't you print with a pen?
- 17. What is the cost of those pages printed with the little types?
- 18. How did they discover the printing press?
- 19. Did the Indians use a press or did they print?
- 20. Show us how to set type.
- 21. Why do they make so many copies of books?
- 22. How is the ink put on the pad?
- 23. How much would a thousand leaflets cost?
- 24. How are newspapers like the Tribune printed?
- 25. Is printing done just the same in other countries?
- 26. What was the cost of the first book printed?
- 27. How are different types made?

The post-office group was organized for the use of the whole class. The group arranged the room in streets, which were the aisles between the seats, and put numbers on every side to show the house at which each one lived. They asked the teacher to give some time for every one to write letters, and they showed the class how to address the letters properly, pointing out that those not properly addressed would be put in the dead-letter office. At another time they showed the class how to write letters and what punctuation marks to use, and got permission to have the letters opened at the post office to see if they were properly written. The group provided the members of the class with envelopes, and later on with stamps which they made. Before this was done

stamps were drawn on the envelopes by each pupil. There were, of course, regular times for collection and delivery. One of these letters is given below, and is interesting as showing the responsibility that the boy was feeling for the group of which he was leader. It runs as follows:

April 2, 1900. Chicago, Illinois.

Dear Ralph,

I am so sorry that I cannot come to school. I hope you will read about the Battle of Bunker Hill for group work until I come.

When the post-office group came before the whole class, they had prepared themselves for questions by a visit to the substation near by, and what they said proved to be so interesting that there were a great many questions asked or statements made by different members of the class. The teacher wrote down thirty-two of them.

At the end of the year we asked the children to write out a paper giving a list of the groups they had been in, and to say which of these they enjoyed most and which they thought the best. Here is a paper from a girl.

- 1. Beauty and the Beast.
- 2. Reading group.
- 3. Sleeping Beauty.
- 4. Sewing.
- 5. Snow White.
- 6. Three Bears.

The group I enjoyed most being in was the Three Bears group. The thing given to the room that I thought was the best was Cinderella.

Here is one from a boy.

- 1. I have been in the printing group.
- 2. Farmer group.
- 3. Firemen group.

- 4. Wild West group.
- 5. Battle of San Juan Hill group.
- 6. Shepherd watching his Flocks.
- 7. Arts group.
- 8. Reading group.

The group I enjoyed most being in was the Firemen group. The thing given to the room that was best was the Decoration Day play.

Some of the pupils were in as many as fifteen different groups during the year. Of course these groups did not last so long as those referred to in the above paper. There was thus a variety of experience, suitable for young children, and undue specialism was avoided. The whole class, moreover, was interested in everything done by each group.

During the year the same kind of work was introduced into the fourth grade, and here the pupils, during the latter part of the year, took possession of the large attic in the school and formed a village, with houses and workshops in different parts. There was a townhall where the class met together as a whole. The different houses were furnished with wall paper, chairs, flowers, etc. Dishes were modeled in clay. One boy set up a battery of his own, made to run a bell as a signal to the villagers. Calling was conducted formally, calling cards were printed, and a number of different activities were instituted.

CHAPTER VII

SELF-ORGANIZED GROUP WORK (continued)

During the year 1901–1902 similar work was started in the Training School of the Colorado State Normal School. In the third and fourth grades one of the first groups formed consisted of two boys. One of these spoke to the teacher and told her that he wished to make a hay stacker. He explained how he intended to make it, and said that he had another boy to help him. The teacher gave him a piece of paper so that he could draw out his plan, which he did. The two boys finished the work in about six weeks, having at the beginning of this period only one hour a week in which to work. During the work there was no hitch or uncertainty of procedure.

The next important plan in the same grade was offered by a boy who wished to construct a two-room cottage. The plan of this was brought in at the beginning, and showed a full comprehension of what was needed. He had selected four or five boys to help him. The principal difficulty was one of cost. He estimated, on the basis of measurement of lumber, nails, etc., and prices obtained at his own solicitation from dealers, that the cottage would cost \$23. There was some talk of raising this money among the pupils, but only a very small amount was forthcoming. The idea from the beginning had been that the cottage could be used by all the members of the class as

a playhouse, or even for some recitations. The group were asked to go over the calculations carefully and see if they could reduce the proportions of the house so as to make it less expensive. They changed it to a small, one-room house with a shingled roof, a door, a large window, and a small window at the back. The cost of all the material was obtained from dealers. About \$10 was found to be the very lowest figure.

At this point the teacher obtained a grant of \$8 from the school, to be given to the class on the condition that nothing further would be asked for that year. This changed the conditions somewhat, and since the whole class was concerned, the teacher described this offer to them, giving them to understand that the money could be used, if they chose, in other ways than the building of a house. Representatives of the building group spoke on the advantages of having a house, but some wished to buy a cabinet and others wished to have an aquarium with goldfish. The teacher even went so far as to suggest that they could buy candy. They calculated the amount of candy that would come to each at the teacher's suggestion, but the proposal, though taken seriously, was not accepted, and indeed never gained any adherents. The building group proposed that if the house were built, other groups could be formed to make various things that would be needed to furnish it. Chairs, beds, and tables were necessary. The girls, they thought, might make curtains and bed clothing. The house, too, ought to be papered and a garden laid out. The small window ought to be provided with a stained-glass design (done in paper). No decision, however, was reached that day. The day following further influence had evidently been

exercised by the group, for all the class were unanimous in wishing to devote the money to the building of the house, and to supply what additional money would be needed.

In carrying this out there were many difficulties to overcome, and many mistakes were made. The time estimated to complete the house was found to be altogether too short, so that the work was stopped during part of the winter; but the house was finally finished, and stood resplendent in its thick coats of green and white paint. Meanwhile chairs, a table, and other furnishings had been made, the stained-glass window put in, and the garden laid out, to be planted and irrigated. It was viewed with pride and affection. The faults in measurement of beams and laying of the shingles were pointed out by the pupils, but these defects, which were not at all apparent to an unskilled eye, did not prevent the satisfaction of every one concerned.

It is evident that in work of this kind preliminary planning is of the greatest importance. It is at this stage that the mental resources of the whole group should be completely drawn out. This is the period needing the most thorough discussion. The image or impulse, as it exists in the mind of one pupil, is not enough. This must be expressed clearly so that all the other pupils understand it, and so that they can get an opportunity to modify it or to object to it entirely. The teacher, too, since he must give his consent to the plan, may need to be persuaded. He can offer advice or make suggestions which have more effect now than at any other time. This, indeed, must be done carefully if at all, as there is the danger that the children will be attracted to some brilliant proposal which they do not understand sufficiently to carry out. These suggestions

may be like the grain which fell by the wayside and grew well at first, but withered away because it had not sufficient depth of earth.

If the teacher makes what he thinks are good suggestions, he should see to it that they are taken as nothing more than suggestions, and that the children realize their own responsibility. To succeed in this he will need to listen carefully, and perhaps expand the objections that may be offered to his suggestions; or he may need to offer seemingly crushing objections to his own ideas, and let the children defend the original proposals if they are able or care to do so. If the teacher fails to do this, he will find that he really has the group on his hands, — that his idea is not the fertile, reproductive thing springing up in other minds that he would like to have it, and that the original leader of the group will have been practically displaced and reduced to the position of a lieutenant. It is the democratic responsibility to one's own ideals and to others on the same social level, and not responsibility to the teacher, which this phase of work aims to educate.

The preliminary planning should be pushed as far as possible, and made as definite as the mental character of the children and the nature of the project in hand will permit. In this respect the building of a house, for example, will be quite different from the making of a play. The planning is itself often something which requires concrete illustration and preliminary work in its production. This was true of the drawings and the estimates of the cost of the house described above, and the small group of boys worked on these for some days. If the plans had never been realized in the actual building of

the house, the time spent on their production would itself have been quite worth while.

This would not be simply for the reason that it could be regarded under the head of what teachers call "an educative exercise." Types of this latter are to be found plentifully in all kinds of text-books. Arithmetics, for instance, are filled with such exercises. Pupils are asked to work out the calculations for papering a room, for mowing a field, for catching a hare, and what not, until they lose all sense of the reality of these operations. It is supposed that "drill," consisting of repeating these disjecta membra of real arithmetic, will produce facility. Meanwhile the insight required in applying processes is usually left out of consideration, and the child is not trained to ask the question or frame the problem which is essential to understanding. One real problem, where calculation is applied to get at results that are desired by the pupils, is worth hundreds of this false, wasteful, and artificial kind. We have already seen this in the averaging of the cooking group, and the preparation of plans and estimates by the boys of the house group is another similar case. This planning, even if the building of the house had been given up, was not a mere exercise. It was undertaken to find out whether the house could be built or not, and if it had turned out that this would have been impossible, the calculations would still have served a useful purpose from the point of view of the children themselves. On no other conditions could they be regarded as yielding any satisfactory social service.

The main point in the preliminary planning is to decide whether the project shall go on or not. It is well to realize that not every plan or impulse in life needs to be executed,

and in self-organized group work the children have before them the choice of aims, as well as the selection of means. Before their aims have been thoroughly fixed is the best time for attempts to divert them from their purpose. To give up a plan at the beginning may be wise, later on it may be a desertion. It is also a favorable time for deliberation and inhibition. It is a time for enthusiasm, but it is well to delay somewhat, so as to be sure that the enthusiasm is well grounded and has sufficient carrying power. With older pupils it would be well to inquire as to the possibilities of members wishing to leave the group later on, or being forced to do so by external circumstances. Some protection surely ought to be given to the rights of contract, and this is a function which would naturally be exercised by the state or governmental power of the teacher. The possibility of failure at every stage ought to be taken into account as far as possible.

In doing this, however, it is the experience of the children and not of the teacher which is the main consideration. It is to be expected that some plans will fail and groups disband long before they have finished what they intended to do. And this may be at unexpected points, or in face of difficulties that have been previously thought of. There must be an element of risk if the work is to be really organized by the children. "The best laid plans o' mice and men gang aft a' gley."

In the beginning of the year a higher percentage of failures is to be expected, and the teacher may wisely enough approve for trial more doubtful schemes at this time than later on. After some experience of this kind has been attained both teacher and children will have actual cases to

point to, where it will be found that not only the plans themselves, but the character and disposition of the individuals back of them, as in Jack's case, are exceedingly important. There ought to be opportunity for groups to disband as well as for individuals to leave groups. Usually this latter can be arranged without serious disadvantage to the group. An individual who gets among his comrades the reputation of being flighty, brings upon himself the natural consequences, as did Jack. In the preliminary planning the teacher, in case he suspects the capacity of any one, should raise the question and see that the other members of the group appreciate the responsibility they are taking in having him for a member. This stimulates loyalty to one another and promotes honor feelings among the group.

Where the group bond is weak, individuals are disposed to be vacillating. In proportion as a feeling of union with or service to some one else comes in, responsibility increases. Even when plans were brought forward by single individuals, they usually concealed or took on later some social significance. I may illustrate this by a single case, in which there was also a large element of failure. A fifthgrade boy, rather belated in his development, wished to go with a number of others who were modeling in clay. He was not, however, connected with them in any organized plan. His idea of what he wanted to do was proportionately indefinite, and at first he looked forward to but half an hour. He seemed to care very little about what he was going to model, but mentioned a definite object, perhaps more to get an opportunity of handling the clay than for any other reason.

As he was working, I came up to him and asked him if I could help him in any way. The fact that he had no particular problem in mind led to a vague answer. Now it is plain, as already indicated, that if a plan has not sufficient life in it to stand a struggle for existence with other plans that may come easily to mind, it is not sufficiently intense to be worth while. A resolution that cannot resist a certain amount of temptation is not very well adapted for a hardy life, nor is it likely to be well carried out. It is better that such weaknesses be discovered at an early stage, if possible. I accordingly set myself to see if, by using a moderate stimulus, I could tempt the boy to desert his plan.

I think a cup or a vase was the object he was modeling. I said to him: "What's the good of making a cup? You have plenty of them at home, haven't you?" I said this, of course, somewhat tentatively, so as not to suggest the slightest feeling of authority on my part. The boy at this stage was, I felt, too weak to resist a powerful stimulus. He went on modeling without giving much of an answer.

I then said: "Why don't you make a rest for a pen or something like that? You could make it just long enough to hold pens so that the ink wouldn't fall on the desk when you laid them down. You could put in a little cup for ink, too, and make it like a fern leaf, with the stem winding round the little cup. Or you might, perhaps, make a frog looking into the little pool of ink"; and so on, giving a number of scattered suggestions. One of these appealed to his imagination, and he said: "Yes, that would be better"; and he started to sketch in clay the new idea. (I may say here that we had a kiln in the school, and that these utensils could be fired, then painted, re-fired, and actually

used.) The next day he was working quite vigorously at his penholder.

The teacher of the room, hearing the story of the boy's change of plan, said: "That boy is so shilly-shally that if I should go and ask him to change to something else, I believe he would do it." I replied: "It would be good to try. If he is to develop the power to resist temptation at all, he must get just such experiences." She provided herself with a little china pinholder and showed it to him, thus presenting him with a sense perception as against his own image. She pointed out the advantages of the pinholder as well as she could, including the ease of its manufacture. The boy was again pleased with the new idea, but was evidently somewhat disturbed. He finally said: "Well, I would make the pinholder if I hadn't said that I was going to make the penholder." "Oh, the superintendent won't care," said the teacher. "No, I suppose he won't, but I kind of thought I would make it and give it to him so that he could use it on his desk." And he went on with the work he had in hand.

It is evident here that what enabled the boy to resist the second temptation was the social motive, in which he had chosen me as a member of his group. Unfortunately for me, the penholder was never finished. A checkerboard which he had started in the sloyd room weighed on his mind, and the next day he proposed that he should use the time which had been given for modeling to finish the checkerboard. He said that the holidays were near by, and that if he did not get some extra time the checkerboard would never be finished. The teacher permitted him to make the change.

I saw him the next day and said jokingly to him: "You're a nice kind of fellow, changing around all the time! Is that the sort of man you're going to be when you grow up? I dare say you would change again for very little. Suppose I should give you ten cents, would you go on with the penholder?" "No," he said, "I wouldn't." "How much, then, would you take?" "I wouldn't do it for less than the price of a pair of boots." As the little fellow came of a poor family and was sadly in need of a pair of boots, I could readily appreciate the measure of his present resolution. Further temptation was not offered, and the checkerboard was finished in time.

A course in temptation may be a new thing for the public school, but it is a necessary part of the process of finding one's self. After all, in the most spiritual sense of the words, every one has his price. The tragedy of it is, as George Eliot says, that many sell their souls and fail to get the price they really want.

When self-organized group work has been tried in the higher grades, it is found that the social consciousness of the children, since it is considerably more advanced, leads often to an organization of the class as a whole as a leading feature of the work. There is less naïveté among older children, and for this reason, when the idea is first broached, they may look upon it somewhat askance. The school habit has obtained a hold upon them, and many of them have lost a good deal of their natural spontaneity and resourcefulness. The idea of getting up lessons for the teachers has been accepted, and in many cases the yoke may have come to fit with a fair degree of comfort, especially when a good deal of time is left over for pursuits in

which they are more keenly interested from a personal standpoint.

To pupils breathing this atmosphere the idea of putting themselves into school work which they cut out for themselves seems a little too arduous. Why should they, when they have taken passage in a ship which ought to arrive at graduation in its own good time? It is only necessary to guard against falling overboard. Besides, is it not the teachers' business to make things interesting? Why should pupils try to interest themselves or others?

These tendencies are, however, only superficial, and if all the virile individuals have not already left a school which they feel does not appeal to their true ambitions, pupils of the higher grades often go into such work with the greatest enthusiasm. Some examples of this may be cited from an eighth-grade class in the Colorado Normal School, where a group of considerable size was started for the study of German. The pupils heard that one of the Normal students was a German, and they got her consent to act as a teacher. Following her traditions she started them off on exercises from a text-book. The pupils put up with this for three or four days, but at the end of this time they proposed they should do something more natural and interesting. "Talk to us," they said, "in German. Tell us the names of some of the things in the schoolroom, and perform some simple actions, using the words that accompany them, and ask more questions." From this as a starting point the group made considerable progress in spoken German.

After some experiences in small groups, the class practically turned the history period into self-organized work.

The subject for the year in this grade was American history, and the pupils proposed, toward the beginning of the year, that, instead of studying about the historical events? in the usual way, they organize themselves into the American Congress and act out the debates and decisions of this body from the beginning to the present time. It will be noticed that the class accepted the general aim, namely the study of American history, but proposed within this general aim to outline their own course of study. The teacher agreed to this, and promised to give them a written examination on the work they actually did. A boy was chosen to act as George Washington, the first President, and members of Congress for the different states were elected by the class. The Senate and the House of Representatives occupied different ends of the schoolroom, separated by screens. A government printer was selected, who printed copies of the bills that were brought into Congress. The class prepared themselves at home for the debates on their bills, but at times when this was difficult they adjourned, sent to the library for books, and in little knots, assisted by the teacher, got up the information that they needed. The form of the bills was obtained from an actual bill of the Colorado legislature. The total number of bills could not, of course, be introduced, but the selection made was representative of the important affairs agitating the country at the time. I have in my possession about forty of these bills, from which I have selected eight. It will be noticed that these bills show errors in typography, spelling, and construction. Different printers of course had different standards and capacities. Faults were pointed out by teachers and pupils, but even at the end some still remained.

H. B. No. 1

A BILL FOR

An act to appropriate \$25,000,000 for the President's use, to buy arms and ammunition, and to pay men to suppress the rebellion which has been declared to exist in the northern states.

1. Be it enacted by the Senate and H. of R. in Congress assembled, that we appropriate \$25,000,000 for the above purpose.

Homer Randall.

Sen. from Georgia.

S. B. No. 1

A BILL FOR

An act to provide for the Compromise of 1850.

- 1. Be it enacted by the Senate and H. of R. in Congress assembled that California be admitted as a free state.
- 2. That slave trade that is, buying and selling of slaves be abolished forever in the District of Columbia.
- 3. That there should be a new and very stringent fugitive slave law.
- 4. That Mexico and Utah should be made territory without reference to slavery that is, the people should make them free or slave.
- 5. That since Texas claimed so much of New Mexico as was east of the Rio Grande, she should give up her claim and be paid money for doing so.

John Gibbons.

Rep. from Maine.

H. B. No. 3

A BILL FOR

An act to provide for the punishment of land misrepresentors.

- 1. Be it enacted by the Senate and H. of R. in Congress assembled that a fine of (\$10,000) be laid on persons who misrepresent land.
- 2. That a term in prison not to exceed ten years be dealt out to them.

Laura Waters.

Rep. from Penn.

H. B. No. 3

A BILL FOR

An act to provide for the building of a harbor at New Orleans.

Sec. 1. Be it enacted by the Senate and H. of R. that we appropriate \$2000 for the building of a harbor at New Orleans.

Mabel Collins.

Representative from Maryland.

H. B. No. 1

A BILL FOR

An act to provide for the purchase of Louisiana territory.

- 1. Be it enacted by the Senate and House of Representatives of the U. S. that we give the President power to purchase the Louisiana territory.
 - 2. That we pay fifteen million dollars (\$15,000,000) for it.
 - 3. That we hereby appropriate that sum for this purpose.

Mattie Miller.

Sen. from N.C.

S. B. No. 2

A BILL FOR

An act to provide for the fortification of the coast.

Be it enacted by the Senate and House of Representatives that guns be erected along the eastern coast of the United States.

- 1. That 12 guns be placed at New York City, and that 12 mines be laid in the harbor of New York.
 - 2. That guns be erected and mines be laid at Charleston, S.C.
- 3. That we request the Sec. of War to place troops at Portland, Maine.

S. B. No. 1

A BILL FOR

An act to provide for the building of ships of war.

- 1. Be it enacted by the Senate and H. of R. that we direct the Sec. of Navy to build 12 ships, arm and equip them as soon as possible.
 - 2. And that we hereby appropriate \$5,000,000 for this purpose.

H. B. No. 1

A BILL FOR

An act for payment of debts, with interest in full, made by the Congress of the Confederation.

Be it enacted by the Congress of the United states that we assume the responsibility of paying all the debts made by the Congress of the Confederation; also interest on that debt to be paid in good sound money.

When the class came to the Dred Scott case, they had not thought of the Supreme Court, but when its need was apparent it was forthwith created, the prisoner was brought in, and the case was argued on each side by lawyers, both of whom made excellent speeches, and the historic decision was finally reached.

When the Civil War arose generals were chosen, who, with the assistance of other members of the class, laid out the middle and southern portion of the United States in the school yard. This was done on a large scale, occupying about one hundred feet each way. Hills of earth were thrown up to represent the Appalachian Mountains, and proper indentations marked the rivers and the seacoast. The generals and their officers then described different periods of the war, the rest of the class looking on and asking questions. No acting out of the war was attempted, imaged representations with the aid of the relief map, over which the pupils walked, being all that was desired.

I hardly need to say that the class got a thoroughly good grip of American history. A great deal of special work was done. Libraries throughout the town were ransacked for all kinds of information not to be found in the usual textbooks of history. Books and newspapers printed during

the period that the class was reënacting were particularly sought after. The discussions naturally were not confined to school hours, but ran out into the playground and the home. Those who were most interested did much more work than they would have accomplished under the usual course of study, and this probably applied to at least three quarters of the class. Those who were not so eager or so competent were, to some extent, kept up by the enthusiasm of the rest; and even the worst did as well as they could have been expected to do under any circumstances.

As the last instance shows, self-organized work may be dominated by the class as a whole, which maintains control over individual or subordinate groups that may be formed. This, as already stated, is usually characteristic of the higher grades, but it sometimes appears lower down. As an instance of this, the experience of a teacher of the fourth grade in the Everett School, Boston, may be cited. This was a case where only one group was openly formed in school, but the class as a whole took charge of the group and modified it to suit themselves. This was possible largely because the work selected was the making of a play. Here follows the teacher's description:

The play of "Old Pipes and the Dryad" was given by a class of girls in the fourth grade. Stockton's "Fanciful Tales" had been read during the regular reading hours. One tale, "Old Pipes and the Dryad," was enjoyed very much. It was suggested by the teacher that the story might be dramatized and given by the class. Two or three different groups of friends considered the possibility, and finally one girl—Teddy—who was very anxious to be the Dryad, really did dramatize the story and assigned the parts to girls whom, as she said, read well and would learn quickly. They worked together and consulted the teacher when in difficulty; for instance,

they did not see how to put descriptive paragraphs into conversation. The process was illustrated and they did the rest alone. However, the writing of the play was comparatively easy because the text was followed minutely where possible. At first the play was all in one act.

Rehearsals began before the parts were learned. "It is easier to remember when you are doing the things," as one of the girls expressed it. They used their own diction at first, simply keeping the general sentiment of Stockton. But gradually, little by little, the text expression was introduced, because it was admired by them, as being more expressive than their own words. Hence there was no formal declamatory air in the reading of their parts. All was simple and childlike, for the words *seemed* to be their own. Most of the rehearsals took place before the class, who proved to be hard yet helpful critics. Each and all of the fifty girls felt at liberty to speak at any time, if by so doing the play could be improved. The production of that play satisfactorily was the aim not only of the players but of the entire class.

Quite late in its growth the play was divided into four acts. The change came about in the following way. The girls said, "It is very queer to have just one act, as if the play took only one day. In the story, first it is springtime and then it is fall. We must tell the people that time has passed on, or else it will seem foolish."

"Yes, and in theaters where things take place at different times and at different places, there are acts. Then the time passes in between."

So, to be logical, the play was divided into acts. The players gave their play, and were stopped by the class whenever a natural ending came.

One girl was dismissed from the play. She took the part of one of the children in the play, and "wiggled too much, and exaggerated her 'sh!' too much." Consequently the class objected, and a contest was held to see who would have the part. Another contest took place which was interesting. The Dryad was sick, and word came from her mother that there was a possibility of her not returning to school. This caused much disappointment, but the play had to be given, so a contest was proposed to see who should take the Dryad's part. One night's preparation was allowed at the suggestion of one girl, and following are some remarks that were made at the contest. About twenty took part.

"Voice too high!"

"Voice too deep! Not like a fairy's!"

"Acts too stiff!"

"No one can do it as well as Teddy! She knows how to use her eyes!"

Naturally Teddy's reappearance at school was hailed with delight.

The class costumed the players, each one thinking it an honor if her donation was accepted. A hat came from one, a cane from another; a bunch of flowers here, and a crown there. The staging was very simple, on account of lack of room. A clothes closet was the tree; a screen, the house; the desks, the trees; and ordinary chairs the benches and stones.

One girl persisted in saying, "I will bring the money," when she should have said "take." The teacher objected, but with no effect. One day, however, a stranger who saw the play said: "Why do you say bring? I didn't like that one part." After she left, the class asked why bring was wrong. A lesson—not formal of course—was then and there given, after which take was always emphasized.

The play was given fourteen times to audiences of about fifty at a time, and once at another school before two hundred and fifty grown-up people. The girls were never self-conscious and spoke with exceptional clearness and distinctness.

During the rehearsals there was really no "discipline" necessary. Each girl felt free to get up and express her ideas, and each one seemed happy.

Once "Old Pipes" was absent, and a class had been invited to see the play. But a substitute came forward, said that she knew the part, and really did do it quite as well as Old Pipes himself. The play was given by some of the other girls at their homes and elsewhere.

The original story was reread once, and even the poorest reader in the room read remarkably well.

Reading, writing, composition, language, and spelling were taught indirectly and directly by the play, and the feeling of good fellowship that resulted was worth hours of "moral training."

The first act of the play will show the character of the children's work.

OLD PIPES AND THE DRYAD

Act. I

Persons acting:

Place of action:

Old Pipes Old Pipes' Mother Three children

- I. Deep forest
- 2. In front of Old Pipes' cottage
- O. P. (sitting on a stone). Children, I am very tired to-night and I don't believe I can climb up this steep path to my home. I shall have to ask you to help me.
- Chil. We will do that gladly! Come! (Two children take him by the arms, the other pushes him up behind.)
- O. P. (sitting down on bench in front of cottage). I am sorry that I tired you so much!
- Ist child. Oh, that would not have tired us if we had not been so far to-day after the cows, the sheep, and the goats. We thought we should never find them. (Other children motion to child not to tell.)
 - O. P. Had to go after the cows, the sheep, and the goats! Why, what do you mean by that?
- 2nd child. Why, you see, good sir, that as the cattle can't hear your pipes now, some one has to go after them, and the Chief Villager has hired us three to do it.
 - O. P. How long have you been doing this?
 - 1st child. About a year now. But we are rested now and must go home. Good night, sir.
- Oth. chil. Good night. (Go downhill, 3rd ch. shaking others.)
- 3rd child. Why did you tell the poor old man?
 - O. P. (shouting). Mother! Mother! did you hear what those children said?
 - Mother (coming out of cottage). Children! I didn't know there were any children here.

- O. P. Yes, three children helped me up the hill, and they told me that for a whole year the cattle have not heard my pipes and that they had to go after them.
- Mother. They can't hear you? Why, what's the matter with the cattle?
 - O. P. Ah, me! I don't believe there's anything the matter with the cattle. It must be with me and my pipes that there is something the matter. But one thing is certain: if I don't earn the wages the Chief Villager pays me, I shall not take them. I shall go straight down to the village and give back the money I received to-day.
- Mother. Nonsense! I'm sure you've piped as well as you could and no more can be expected. And what are we to do without the money?
 - O. P. I don't know, but I am going down to the village to pay it back. Good-by mother!
- Mother (gazing at him until he disappears). Well, if you will go, good-by. (Rises and goes into the cottage.)

The control of the whole class over everything that is done is one of the characteristics of the self-organized work carried on in the classes of Miss Lotta Clark, of the Charlestown High School. Says Miss Clark: "I talked the matter over with my classes and asked them how they would like to try the experiment of conducting their history lessons themselves. The novelty of the idea pleased them, and after considerable informal discussion we decided to carry on our recitations in the form of business meetings. A chairman was appointed from the class to take charge of the meeting, and there was something of a sensation when I exchanged chairs with him. He appointed committees to nominate candidates for a president, vice president, and secretary. These officers were elected by ballot for one month, and their duties were decided upon by the class. We had an amusing

time when they tried to decide what they ought to do with me. I told them I was going to do just as little as possible in the class, so that they could have all the time and opportunity there was. They finally decided to call me the "executive officer," with power to exercise full authority if necessity required.

"The business form of the meeting did not occupy a great deal of time. As a matter of fact, we had time to spare. The time which had previously been taken up by the teacher's questions was saved, and the pupils could easily recite in half an hour what it had taken them an hour to prepare. . . . The roll call and the report of the previous day were sometimes finished in five minutes, the lesson of the day in thirty more, and we found ourselves with ten minutes to spare. There were various suggestions as to what we should do with the extra time. One was, that they take longer lessons, and this being adopted, the habit grew of letting them assign their own lessons. The result was that they almost always took longer ones than I had been in the habit of giving them.

"Another suggestion was that the scholars should collect pictures and show them to the class during spare minutes. One boy said he didn't have much luck in finding pictures, but would like to read things in other books and tell them to the class. A girl asked if she might draw some pictures from a book in the library, and still another boy asked me to get permission for him to go to the Art Museum with his camera and take photographs of the casts there, that were connected with the work. We did all these things and many, many more; and these suggestions led to the richest development of all in the work of this year. The

classes formed themselves into little informal clubs, met at recess and after school, and decided what each would do to contribute something interesting to the lessons. There were the drawing clubs and the camera clubs, while the club that brought in pictures and newspaper clippings, and told interesting accounts which they had read, called themselves the Sidelights Club.

"Among these groups the most important and successful was the Library Club of last year. It consisted of twelve pupils most of the time (sometimes more). Their object was to go to the library once a week and read there, among the old and rare volumes and newspapers, interesting things about the early history of their home - Charlestown. As some of these volumes were of great value and the newspapers were very old, it was necessary to get permission to use them from the head librarian of the main library in Boston. During the interview which took place when the teacher went to get permission for the pupils to use these things, one of the head officials said after he had heard a description of what was wanted: 'You may have anything you wish either at the branch or at the main library, but we tell you frankly that we do not expect that you will accomplish anything. It is not our experience that school children care anything for that sort of thing.' Their only stipulation was that the teacher should be present when the pupils went to the library, to be sure that the books and papers were handled with the greatest care. The girls selected Thursday afternoon, and the librarian at the branch provided a special table for their use, and put all the books we had asked for in a convenient place by themselves. The girls were very careful that the teacher should be

punctual and regular in attendance, though at times it was very hard for her to do so.

"Many interesting things were learned and reported to the class and used as material for the school publication. But toward the end of the winter they made a discovery which was the most interesting of all. In reading a book by Mr. Eades on old Charlestown, they discovered that John Harvard was a citizen of Charlestown. Like many other people, they had always associated Harvard with Cambridge, and were amazed to find that the Harvard grant and the site of the home were only a stone's throw from the place where they were studying. They dropped their books and started out to find it, and after some searching and calculation they found the place which is now occupied by a brick apartment house. Surprise was expressed that the place had never been marked, and the half-laughing suggestion was made that 'we mark it.' The occurrence was reported in the history class, and the whole class took the matter up and discussed different phases of it at different times. One of the boys offered to find out how much a suitable tablet would cost, and after discussing materials and marking, the class decided that they wanted a granite tablet 3 x 2 feet with the following inscription:

SITE OF THE HOME OF

JOHN HARVARD

1637

MARKED BY THE HISTORY CLUB

OF THE

CHARLESTOWN HIGH SCHOOL

1907

"The boy wrote to a number of firms, stated what was desired, got the prices, and reported to the class that the best price he could get was \$40. Another boy said he thought he could do better, and he got figures and finally asked the teacher and the first boy to go with him to a firm in Boston where a former pupil of the school was employed. This gentleman found that he could make us the tablet at the price of \$33.40.

"Then came the question of how to get the money. The first suggestion was to give an entertainment, but the pupils were confronted by some unusual difficulties. They were occupying a temporary building while their new school was being built, and there was no hall they could use. There were only two months left before school closed, and at one time it looked rather hopeless. The parents of most of the children were poor, and graduation time was approaching, which necessitates much expense, and for this and other reasons class contribution was not favored. The pupils wanted to earn the money, but there didn't seem to be any way to do it in the time they had before their graduation. The teacher suggested that they allow the next year's class to take up the work where they had left it. This plan was rejected, as was also the one to have the whole school take up the work. They said frankly that they had begun the work and they wanted the satisfaction of finishing it if they 'only could.'

"At just this point the teacher was invited to an evening gathering, and in the course of the conversation was asked to describe the work of this class. The listeners were all educators and their sympathy was aroused by this particular piece of work, and an offer was made to collect the money there in that company. The very kind offer was

refused by the teacher for this reason: it would have taken the matter out of the hands of the pupils, and they would have missed the benefit of actually doing the thing themselves, or the disappointment if they failed to do it. This caused a good deal of discussion. One lady gave the argument that in the business world when a man has a good idea he very often gets others to furnish the money to carry it out. A gentleman remarked that it would be a crime in his opinion to allow the thing to fail. The outcome of the matter was as follows: suggestions were made as to the ways in which the pupils could earn the money, and the teacher was authorized to convey to the class the encouraging assurance that they were to go on and earn as much as they could, and if they could not earn it all before they were separated by graduation, the remaining sum would be contributed.

"One of the ways suggested by the company for the pupils to earn money was by lettering diplomas, and three girls earned about six dollars by this means. One of the other girls earned two dollars by sewing, and some of the boys sold papers for their money. One girl's father suggested that a gentleman who had been a graduate of the school be told of the matter, as he is interested in history. Through him the mayor of Boston was interested and sent a check. Every pupil worked and did what he could, whether it was much or little, and the tablet was procured and unveiled on their graduation day.

"That they were doing something 'real' was the greatest inspiration to the boys and girls, and they got much practical experience from it. They learned why treasurers should give bonds, although one girl said that she considered it an

insult to the treasurer, and stated quite forcibly, to the amusement of the others, that she wouldn't be a treasurer if the rest had so little confidence in her. The seriousness of the position came home to the class, however, when the treasurer lost her purse which contained one of the checks belonging to the fund. She had not indorsed it and was greatly pleased that she had not. When the advice of the class was solicited, the matter of stopping the payment of checks was considered, explained, and acted upon.

"The cooperation of the owner of the building on the site of John Harvard's home was solicited by the pupils and obtained. He imbedded the tablet in the wall for them. During Old Home Week a laurel wreath was hung over the tablet, and the boys and girls were glad to have done 'something real,' as one of them expressed it.'

With pupils of a college grade self-organized work ought to be just as feasible as in lower grades. This is shown by the work done in the classes of several of the teachers of the Boston Normal School, who have experimented successfully in this direction. The following reports of two of these self-organized groups in the classes of Miss Dora Williams will indicate the spirit and the quality of the work. Other groups in this class during the same time dealt with Aquariums, Artificial Incubation, Hens and Eggs, Cocoons, Migration of Birds, Trees, the Struggle for Existence, and Adaptation to Surroundings. Self-organized work of this kind must be distinguished from the ordinary college elections, in which the pupils are not called upon to organize the subject. It differs also from the most of seminar work, where the choice of subjects and effect upon the class is left mainly to the teacher.

GROUP WORK IN SCIENCE

SEA LIFE

Having discussed the value of self-organized group work in the psychology class last year, it was thought it would be decidedly beneficial should the students of the Normal School be given an opportunity to try it for themselves. Consequently last fall this opportunity was offered in the science class.

One period of home preparation was allowed, in which the students might think up special topics upon which the groups might work with benefit to both themselves and the class. At the next recitation each student offered her suggestions, and a list of these was made and their values discussed. Then each pupil looked over the list and chose the topic in which she was most interested and which she thought it would do her the most good to work upon. In this way the groups were entirely self-chosen, for each pupil was free to enter what group she wished, and even the topics were not assigned by the teacher.

As was natural, the topics covered a wide range, for such a large number of students could not help having widely differing interests. This, however, was desirable, for when the groups reported to the class the knowledge of the class was so much the more extensive.

As was also natural, the groups varied greatly in size, for some of the topics appealed to many of the girls while others seemed to interest only a few. Thus there were six in the group studying birds and only two in the group studying sea life, of which I was a member.

Our reasons for choosing this particular subject were twofold. The first was that we had spent a part of last summer at the Marine Biological Laboratory at Woods Hole, Massachusetts, and had there become much interested in sea life. We had also collected some very good specimens. The second reason was that we thought that the recognition of the ascending development of the organs of defense and offense would be of use to the whole class, especially if we could actually show specimens illustrating this ascent in type animals of principal phyla.

A description of the technical work done will be given later, but just here I want to tell of what we got out of the group work aside from subject-matter.

At the present time great stress is being put upon the fact that we must keep the children interested and self-active to do them the

most good in our work with them. We certainly were interested in our work or else we should not have chosen the subject or formed our group. We were decidedly self-active and independent, owing to two facts: first, we wanted to have something of value, well arranged, to present to the class; second, we needed to do the work ourselves in order to accomplish this.

We are taught nowadays that the powers of coöperation and organization must be trained to enable one to fill properly any station in life. In this group work we had to coöperate, for had we not met together and talked over what each should do that would best further the end we had in view, we should never have reached that end at all, and there would have been no unity in our work. We had to organize our subject-matter and material, making a clear plan as to how we should present the former and show the latter, else, again, our work would, when brought before the class, have lacked unity and would not have been logical.

A certain amount of self-control was necessary to prevent one member of the group from acting selfishly or trying to dictate to the other. Perseverance was needed in several instances where we had difficulties in carrying out the plans we had made. It seems to me that these last two qualities of the will are especially desirable, and that if we can train them by such a delightful method as group work, we should not hesitate.

I think that enough has been said to show how valuable a device group work is in training important mental powers, so now I will give a brief account of the work done.

We first made out an analysis of the ground we wished to cover, and had it accepted by the class. The special line of thought which we wished to follow was the development of the organs by which the different animals are able to sustain life and keep their race surviving. We did this by showing specimens of type animals of six phyla, starting with coelenterata and including vertebrates which showed clearly these points. These specimens were some that we had collected that summer and preserved with reference to some such need as this.

We arranged these specimens around on the tables in the class room before recitation in such a way that each three girls would have one specimen. In a couple of cases we had only two specimens, so that we had to have these passed around the class as they were discussed.

In order that both of us should have the opportunity of working with the class, we divided the work into two parts, one of us taking the introductory talk and the first three phyla, and the other taking the other three phyla and the ground covered.

Our idea was to draw the facts from the pupils after they had examined the specimens, instead of telling them everything. We got almost all the points we wanted, with only suggestions from us as to what line their observations were to follow, and in this way they were much more interested and active than if we had simply stated a number of facts to them.

As the different facts were mentioned, they were written on the board in the form of the following topical analysis, which the pupils were allowed to copy for future reference if they wished.

SEA LIFE

I. Cœlenterata.

Sea anemone.

- 1. Organs of offense and defense.
 - a. Tentacles lasso cells.
 - b. Stinging capsules contained in octoderm.
 - c. Elongated cells containing slender barbs.
- 2. Sense of sight.
 - a. Isolated nerve cells at base of tentacles.
 - b. Round refractory cells.
- 3. Sense of hearing lacking.

II. Echinodermata.

- 1. Starfish.
 - a. Organs of offense and defense.
 - (1) Ambulacral feet or suckers.
 - (2) Rows of calcareous movable spines. Pedicellariæ.
 - (3) Tentacles containing olfactory cells.
 - b. Sense of sight. Small eye (red spot) at end of ambulacral groove.
- 2. Sea urchin.
 - a. Organs of offense and defense.
 - (1) Movable spines. Pedicellariæ.
 - (2) Tube feet.
 - b. Sense of sight. Ocular plates bearing eye plates.
 - c. Sense of hearing lacking.

III. Vermes.

Nereis virens (sandworm).

- 1. Organs of offense and defense.
 - a. Two horny jaws.
 - b. Locomotive organs.
- 2. Sense of sight. Eyes in a head.
- 3. Sense of hearing lacking.

IV. Mollusca.

Squid.

- 1. Organs of offense and defense.
 - a. Ten arms provided with suckers. Two longer than others.
 - b. Mouth with two horny jaws. Tongue adapted to rasping.
 - c. Tail and mantle fins used for locomotion.
 - d. Change of color when excited.
 - e. Ink sac.
 - f. Siphon.
- 2. Sense of sight. Pair of large movable eyes on head.
- 3. Sense of hearing lacking.

V. Arthropoda.

- 1. Crayfish.
 - a. Organs of offense and defense.
 - (1) Two antennæ (organs of hearing and balance).
 - (2) Four antennules (organs of smell).
 - (3) Appendages.
 - (a) Thoracic legs.Three pairs maxillipeds.One pair chelipeds.

Four pairs walking legs.

(b) Abdominal. Six pairs swimmerets.

One telson or tail fin.

- b. Sense of sight. Large eyes on a rostrum on stalks movable in all directions.
- 2. Hermit crab.
 - a. Organs of offense and defense.
 - (1) Stolen shell.
 - (2) One pair antennæ, organs of smell.

- (3) Two pairs antennæ, used for balance.
- (4) One pair claws.
- b. Sense of sight. Pair of eyes on stalks.

VI. Vertebrata.

Dogfish.

- 1. Organs of offense and defense.
 - a. Mouth bristles with several rows of double-edged teeth.
 - b. Powerful tail. Rapid swimmer.
- 2. Sense of sight. Eye constructed on same plan as in mammals.
- 3. Sense of hearing. Auditory labyrinth only (structure simple).

Dogs

The subject "Dogs" is quite foreign to the usual subjects taken up in the senior course at the Boston Normal School, but one which has proved to be of great interest to me, and — I hope — assistance to others. My plan of work was to study "The Recognition of Common Types of Dogs" and "Louis Pasteur and Hydrophobia." As no one else was interested at the time in the subject, I entered upon the work by myself.

The first question is, Why did I choose the subject "Dogs"? It was not because I have any especially sporty tendencies, but simply because I was more interested in dogs than in birds or fishes or various other subjects that have been forced upon me all my life. Then, too, I have nearly always had a dog of my own, — at one time an Irish terrier, at another a Skye terrier, at another a Cocker spaniel. Besides all this, I have often seen dogs of various breeds and wished that I could tell what they were. My aim was primarily an unintentionally selfish one, — a hunger for knowledge that would be a pleasure and an advantage to myself; then it gradually broadened out until it was a desire to share with others what might interest and benefit them.

Now for some of the difficulties I encountered. When I declared my intention to the science class, I read disapproval, doubt, and even amusement on the faces of my listeners; but they were all too polite to tell me what they thought — until afterwards. Instead of being discouraged by their attitude, I think rather that I was spurred

on to convince them that I could do it. Not until I was fairly launched upon my task did I realize its extent; and though I spent hours and hours in my work, it was never anything but enjoyable. The further I went on, the more and more absorbed in it I became. In studying "The Recognition of Dogs," besides consulting various books upon the subject, I made numerous excursions to hospitals for animals, and it so happened that the dogs I most wished to see were seldom sick in the hospital when I went there. Pure types were hard to find, too, and it seemed to me that mongrels were numerous. At first, while studying "Pasteur and Hydrophobia," I was in despair, for it seemed as if every book on that subject in the Boston Public Library was written by an antivivisectionist, who bitterly denounced Pasteur. At last, quite accidentally, I happened upon M. Renaud Lezor's book on "Pasteur and Hydrophobia," and also on M. Rene Vallery-Radot's "Life of Pasteur," — both of which gave me most valuable information. Pasteur achieved so many important tasks that I found it difficult in studying his life to stick to my point — "Hydrophobia" — and not to get side-tracked on "Spontaneous Generation," or "Tartaric Acid," or some other interesting subject.

Owing to the kindness of Dr. Tobin and Dr. Wellington, I was finally given the privilege of escorting the senior class of this school to Dr. Tobin's hospital for animals on Newbury Street, to see some dogs and to have a little talk about them. I must confess that I was wicked enough to wish that I might be ill, so that the trip to the hospital for animals might be indefinitely postponed.

From the work that I have done in studying the subject "Dogs," I feel that I have consciously gained more than I ever expected. In the first place I gained a great deal of useful information; and by planning out the work myself, I had a chance to exercise choice and to arrange material logically. By studying the live specimens I gained in powers of observation. A desire to impart to others what I had learned brought out coöperative spirit and a feeling of responsibility. The independence of the work also gave me pleasure. The trip to the hospital for animals and the presentation that I gave to the school of "Pasteur and Hydrophobia" gave me more self-confidence, and that is what I need more than anything else.

For the success of my work I owe a debt of thanks to the Biological Club, which loaned me a most interesting letter written by Miss Helen Scott to Dr. George Gibier Rambaud, Director of the

SELF-ORGANIZED GROUP WORK

New York Pasteur Institute, who loaned and suggested books to me which were invaluable; and to Dr. Tobin, who gave me the privilege of taking the class to his excellent hospital.

Before closing these two chapters on what might be called the technique of self-organized work, and going on to consider its application to different culture themes, a few words seem to be needed on the subject of marking and examinations.

A just recognition of merit is an exceedingly important aspect of all educational work and a necessary presupposition of a good society. To what extent effective merit can be determined by examinations and recorded by marks is a fundamental question of distributive justice both for society and the school. Part of the presuppositions and results of the current marking system have been discussed in the chapter on Tests for the Schools, but a more special inquiry, however short, as to the possibilities of marking in its social relationships is necessary to an understanding of the subject as a whole.

Will stated examinations and formal marking diminish or destroy personal ambition to social service on the part of the pupils, or can these instruments be used to further earnest and serious effort for the good of others?

The answer to this will depend on whether the marks register individual excellence independently of the proved ability to organize and take responsibility for the interest and advancement of others, or whether this additional merit is included in the record. Although the latter virtue is always recognized by every one, it is usually left to be its own reward, and the marking and ranking which follows is concerned with individual ability in an intellectual

performance rather than in successful service to the class, the school, or the community.

One reason for the failure to include the virtue of responsibility and helpfulness to others in a mark is the difficulty of seeing how it can be done. It is doubted whether merit of this kind can be measured with even approximate justice, and attention is thereby focused on the pupils' knowledge of the dictated course of study. It is moreover recognized that certain moral qualities, such as that of faithful industry or application to a task, are indirectly measured and included in the mark given for a well-conned lesson or a brilliant recitation.

It is quite evident that marking of this kind, or, perhaps, any marking whatever, would rarely be resorted to if each pupil were taught alone. Tutors of single pupils are satisfied to commend or to point out the deficiencies in the work that has been attempted, or even to ignore either praise or blame, and encourage and interest the pupil simply by analyzing for him the difficulties and indicating the problems of the lesson that is to follow. Ordinary marking is used chiefly when there is in the same class a number of pupils of about the same standard, and since it is employed without any reference to self-organization or coöperation, the only possible social result is one of individual competition. In addition to this, in the grammar grades at least, the pupils frequently look upon the mark given as pay for work done for the teacher. When this is the case they talk a good deal with each other and with their parents about the marks earned, and the comparative standing of this pupil and that, but very little about the subjects which they are supposed to be studying.

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It is often assumed by teachers that such marking has a good effect upon scholarship. But what can be the meaning of scholarship under such conditions? Why do we wish to know things anyway? Is it in order to get ahead of other people? Or is it practically assumed, when pupils work for marks, that they really do not wish to know the subject and therefore they must be forced to acquire it by outside pressure? If this is so, why use such a word as scholarship? A monkey can be bribed or forced to take off his little hat and beg for pennies. Is it education which has produced this result? Have we here a simple kind of scholarship - a something that is learned for advantage or for fear of consequences to self? Ironically enough, slavish learning of this kind in either monkeys or men often turns out to be the very weapon by which they are exploited by others. They have acquired habits of obedience and industry, but are without resource and initiative. The knowledge they have gained is devoid of any inner power to grow. Except for the commonest work of the world, it remains sterile and unproductive, both to society and themselves.

Real scholarship, on the contrary, means a thorough organization of knowledge from two points of view. First, from the standpoint of the individual pupil. He must construct the subject for himself and make it his own. In the mind of one no subject can ever be the same as in the mind of another. One person will study history because he is going to be a lawyer, another because he expects to preach. The reason for study in each case is different. The center of organization is different, and the result will necessarily be different. Minds grow like plants of different species. They may live in the same soil and air, but

they select and use the nourishment at their disposal for different purposes. One cannot expect a pine tree to be organized like a sunflower or a fern.

The second point of view from which it is necessary to regard the organization of knowledge is social. Individual differences must exist, but they must also be combined in a unity of service. Knowledge is not fully organized until it can be used for the practical, æsthetic, or intellectual interests of other people. Such organization demands on the part of the individual more effective energy of the will and a keener mental insight in order to see his own particular knowledge from the point of view of some one else. For this purpose the student must not only adapt himself to the other person, but readapt himself to the content of knowledge which he wishes to express. The result is to make more profound as well as more practical the internal individual organization of knowledge with which he set out. In order to attain an adequate and thorough individual knowledge, the social point of view, and a more or less approximate view of how this knowledge is organized in the minds of others, is necessary to the scholar.

Scholarship, after all, is never something capable of being divided into blocks or morsels put together in patterns and copied with more or less fidelity. Scholarly knowledge is always dynamic and creative. It grows. It never stays "put." It passes from mind to mind like the spirit of life over dead bones. It vibrates through a different prism in every intellect. It plays a different tune in every heart. Such scholarship is the only scholarship there is. Children are capable of it to the extent of their capacity, and may have as much joy in their little knowledge, if they see its

power with others, as a great scientist in his world-wide structures.

When teachers themselves possess an adequate idea of scholarship, they are disposed to regard the current marking system as an evil, albeit, perhaps, a necessary one. The initial question, however, returns at this point with greater insistence. How is such scholarship to be recognized? Must the recognition be altogether informal and unorganized (as is of course most suitable in the lower classes), or is it possible, as differentiation goes on, to find some way in which the social spirit of coöperation may express itself in favor of those who render it the greatest service? To do this is difficult in society at large. Is it impossible in the school?

The present writer is not of the opinion that this important question of distributive justice can be solved by one or two experiments. The standing of persons in the community or the school and the formal rewards or approval they receive must always be but roughly proportionate to their real merits. It is enough if an approximate solution be indicated, but one which will distinctly recognize the social efforts and the social success of individuals who have been of service in changing the convictions of others, in interesting them in new ideas, in encouraging them to more arduous endeavor, and in organizing their knowledge in deeper and more comprehensive forms.

The work of certain of the classes of the Boston Normal School will give an example of an attempt to mark along this line. The standing of the pupils is determined by a final written examination which counts for one third, and the class work which is estimated at two thirds of the total rank. The class work is the only part of the work which the pupils themselves share in estimating. For the present year all but one of the sections into which the class is divided in one of the subjects has voluntarily chosen the coöperative marking. No section was persuaded by the teacher to adopt the scheme; some of them tried it temporarily, but afterwards adopted it permanently because they considered it fairer than marking by the teacher alone. At any time they please they may revert to the previous style of marking.

The plan is briefly as follows. The class work is in the first place cooperative. Each pupil, either individually or as one of a group, prepares work which is expressed to the section as a whole. Discussion follows, including questions, cross-examination, and the pointing out of difficulties. Each person who presents any idea labors to be assured that this idea is landed in the minds of every one who hears. Any one may call upon any one else to speak. In order to see how successful any individual has been, the pupils and teacher frequently ask how many have got the idea, and whether it was new to them, convinced them of something they were not sure of, or was distinctly helpful in any way. An idea which every one knows already, and which might easily be obtained by ordinary reading, is not considered helpful.

At the end of a certain period chosen by the class, say six weeks or a month, an hour or more is given up to the examination. A preliminary paper is written by each pupil, stating from whom help has been received and outlining the facts of this quite briefly. The pupils then sit around in a circle with papers for marking, and one pupil is called after

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another. The other members of the class are then asked what they remembered this pupil to have contributed to their individual advancement. They are required to prove, under cross-examination, by every one including the teacher, that this help is genuine. Its degree of importance is also estimated. The pupil to be marked is then allowed to say what has been left out of account, and if this is regarded as worthy and has merely been temporarily forgotten, it is counted with the rest. To the pupil's credit will then be, for every distinct contribution that has been made, a figure representing the number of other pupils who have been helped; for one contribution, perhaps the whole of the section; for another, but a few. If the material is regarded as unimportant, although every one remembers it, it is divided by some figure, — two, three, or four, — by common consent.

After all the pupils have been examined in this way, by the amount and value of the knowledge that can be recovered from their comrades, they are easily classified by a simple inspection of the list. The following example of such a list will be of interest to the reader. The letters stand for the names of the pupils.

A — 9, 1, 1/2, 2, 4	= 16 I/2	I — 7	= 7
В — 10, 4	= 14	J — 4, 3, 4, 9, 2	= 22
C — 11, 10/4, 7/3	= 155/6	K — 14/2, 12/2, 5	= 18
D — 10, 2	= 12	L — I/2	= 1/2
E — 12, 3, 3, 2, 1	= 21	M 10	= 10
F — 9, 4	= 13	N o	= 0
G o	= o	0 —6	= 6
H = 12, 8, 6/2	= 23	P — 15/2, 5/2	= Io

CHAPTER VIII

REASONING AND THE TEACHING OF SCIENCE AND ARITHMETIC FROM A SOCIETARY STANDPOINT

The process by which society "keeps itself going" is fundamentally a process of reasoning. Even industrial operations are the results of thinking to realize an end, and are judged by the perfection and logical effectiveness with which they attain it. The primitive hunter, for instance, makes a trap or a fishhook, and catches his dinner as a result of his power to reason. When he uses a tool previously invented, he still invents the adaptations to the particular situation in which it is to be used. Weaving, the making of pottery, the building of a fire, etc., are equally the results of reasoning, even although accident may have led to the observation which started the process.

The end to be reached is always the "truth" in some form or other. A bird in the hand on one side, two in the bush on the other, are the alternatives which the construction of the bird trap aims to decide between. Whichever alternative results becomes the conclusion, and is forced upon the experimenter by the data, some change in which may also change the conclusion. The reasoning here may be largely on a perceptional plane, but in more purely ideational forms the movement is the same. There are always two possibilities, at least, which the mental constructions aim to decide between, nor is it always true that these

different mental constructions are made more rapidly than are the material constructions which represent them.

The alternatives or questions to be decided by the facts have been called working hypotheses, or conclusions when the data support them. Given as certain a set of data or previously known truths, the conclusion is easily obtained. It is a mere verbal exercise. If all are mortal, there is no doubt that Socrates is so. In the same way, if the trap, the nature of the bird, and all the circumstances entering into the result are previously settled, the conclusion is certain. But the conclusion is, in reality, not settled because the previous facts are not known until the bird is caught or Socrates dies. All that can be known is a question or a degree of probability. A working hypothesis thus includes not only the outer form of the hypothetical conclusion, but all the facts which are contained in it.

Since reasoning is always engaged in trying to settle a problem, it is in reality always inductive, i.e. essentially constructive. Deduction is only a part of the problem, and counts as the analysis or clear recognition of what is contained or implied in the construction made. No one makes an analysis without an object in view, and the object in view in reasoning is the proved hypothesis or conclusion.

The direction of reasoning depends on our interests, and we are never much interested unless a problem appeals to us as something which can be settled one way or another, and which is worth while settling. If we already consider a matter known or beyond knowing, we do not reason about it. A being who knows everything does not need to reason. In ordinary perception we usually feel (whether rightly or not) as if we knew directly what seems to be before us. If

our perceptional powers were sufficiently vast to take in the universe, we should not need to reason. But since they are limited and we cannot see round a corner or into a stone wall, we are forced to imagine what it would be like if we could; that is, we build hypotheses based on our experience in order to penetrate the unknown, and we test these hvpotheses by further appeals to experience. We never do this, however, unless we have some purpose in view. The chemist looks into the stone wall and sees atoms and molecules, because he wants to control in some way the material there. The general of an army imagines what his opponent is doing beyond the hill because he wishes to worst him in battle. An hypothesis is thus simply an imagined or conceptual extension of the world of primary or perceptional experience, and is always tested or verified by the changes produced in this same experience.

These experiences, however, are by no means lacking in subtlety. The smile of a friend or the whisper of love is a perceptional experience which may occasion more mental effort, more hypothetical and material construction, to preserve its memory intact, or to produce its repetition, than either the thought of the general on the battlefield or the chemist in the laboratory. In order to get experiences of a high degree of value, we never confine ourselves to the inner side of the world. Even God is no longer the Great Companion if we do not see Him in the human beings we live with and the deeds we do.

The development of reasoning is simply the question of making conscious, and therefore more inventive and controllable, the adaptation of means to ends. But since we are always social beings, both these means and their ends are measured by the good of society. Even when reasoning is applied to gross material, or to mechanical concerns, we need the coöperation of our peers. Since building hypotheses is a work of the imagination, we need to test every hypothesis by the imagination of others. During the process of experience we are forced to analyze, as well as to add new features to our conceptions as a result of the criticisms of others. And when we produce in the outer world the physical result of our hypotheses, we need others to observe these results and to test our perceptions as well as our ideas. Apart from general presuppositions as to the nature of the universe, the background condition of all truth is social, and its ultimate criterion is the survival of the society to which the individual belongs, a result brought about by its improved external or internal adaptations.

These few and scattered remarks on the general character of reasoning may serve as a hint of the pragmatic point of view in logic, already ably worked out in this country by Professors Pierce, Dewey, James, Moore, and others. This point of view is doubtless of service in all branches of education, but its value is nowhere plainer or more emphatic than in the teaching of science. It is also nowhere more needed.

Science teaching, after having stimulated laboratory and research methods in other subjects, has reverted in many quarters to an inadequate classical treatment in its own field. In view of the fact that the older disciplines have been at work for centuries, it was to be expected that the conscious and unconscious methods they pursued should have arrived at a high degree of excellence. These methods are, however, quite unsuited for transfer. The

same kind of training is not to be expected; and although classics and their allied subjects may develop reasoning and observation as well as memory and imagination, it is a different phase of reasoning from that which properly obtains in the sciences. Perhaps it is not too much to say that it would be better to teach less science than to fail to have it fulfill its characteristic ends.

To a class containing seventeen high-school graduates of Boston and vicinity, who had taken physics (all young women), I recently described a lesson given in a thirdgrade class. For this lesson the teacher had rigged up in the basement a rude windlass with a rope running along the floor. The children were allowed to handle the apparatus, and they easily discovered that the rope could be wound up. At this point the teacher proposed to one boy that he might see if he could wind up the rope with some one holding back on it. He chose a boy of his size, and was surprised to find it was so easy to do. He then tried two, and so on till he came to six. Here he stuck, but he said that if the handle were closer up to the axle he could pull up more, as he could run it round faster. The teacher fortunately recognized this idea as the true budding of scientific method, and, instead of ignoring it or deciding upon its merits dogmatically, called the attention of the rest of the class to the statement, without indicating whether she agreed with it or not. In the language of the logician, the boy had stated a working hypothesis. About half the class thought the boy's idea was right. In order to test his hypothesis, the boy proposed to bore a hole halfway up the bar to which the handle was attached, and thus bring it closer to the axle. An augur was obtained and this was

done. At this point in telling the story I stopped and asked the seventeen high-school graduates if they knew what was going to happen. Only one claimed to know, although another said that if she had the formula she thought she could work it out. The rest were in doubt as to what the result of the experiment would be.

This is not an exceptional case, so far as my knowledge of high-school graduates goes; and the answers to certain questions of the dean of the Brooklyn Polytechnic Institute, relating to matters of common observation of nature, indicate that such a condition of affairs is widespread. The fault is not to be laid wholly at the door of a lack of work or ability on the part of either high-school teachers or pupils. It is due rather to the narrowness with which preparation for college has been made, and to the consequent exclusion of free, self-organized work. The result is that independence and self-reliance, either of reasoning or observation, and the spontaneous love of nature which these spring from and engender, are not encouraged by the school, and in some cases are actually blighted by its influence. Secondhand knowledge is peddled out by the teacher in the shape of laboratory directions in lectures, through a text-book, or in catechetical form. The appeal for facts is not made to nature but to the teacher, who, when he gets as far as asking the pupil what he thinks, frequently furnishes the conclusions ready-made by telling him whether he is right or wrong. In such conditions, instead of studying nature the pupil is studying, in stupid and roundabout fashion, the mind of the teacher, and is not being helped to investigate for himself. If, on the contrary, the facts are sufficiently convincing, the pupil does not ask the teacher whether the idea is right or wrong. When the little boy in the case above mentioned had placed his handle nearer the axle, he soon found that he could pull up fewer boys than before. His hypothesis, useful while it lasted, had been disproved by facts, and he did not need to turn to the teacher and ask whether he had been right or wrong. How many science pupils in the high schools ever get so far as to have an hypothesis, or, if so, have the still more illuminating experience of seeing it either proved or disproved by actual facts?

In the elementary schools it is still rarer than in the high schools to find an intelligent appreciation of the value of true hypothesis and experiment. The teacher usually seems to have it all previously arranged, running the course of nature with one hand and her class with the other. A lesson I observed in a third grade by a teacher in training illustrates a very general practice. The teacher's subject was condensation and evaporation, and she very piously knew just what she was going to do in that half hour. She lit a spirit lamp, put a dish over it, and asked the children to say what they observed. She was a very young teacher, and she asked this question a little too soon. The children held up their hands, but she told them to wait a little, as they couldn't see yet what she wanted them to see. Later on the children saw "steam," or water vapor, coming off from the water. "That's right," said the teacher. "Where else have you seen this?" "From horses, locomotives, off sidewalks," etc.; the teacher responding, "That's right," or indicating her approval or disapproval by other words or signs. In this way she led the children to say that "Heat turns water into steam." This she wrote on the board.

She then brought in a bottle which had been cooling outside the window, and turned it round in the steam. The children saw the water on it. "Where does the water come from?" "From the steam." "Quite right." The questions and answers went on for a little while. I interrupted and asked the children, "What would happen if I should put the pan of water (which had been left aside meanwhile, and had stopped steaming) outside the window where the bottle came from?" They did not know. One pupil said he didn't think anything would happen, but he should like to try it. I let him take the pan to the window, when great clouds of steam came off. Here I retired without writing on the board, "Cold turns water into steam," although the same kind of procedure that had been applied in the first place would have justified me in doing so.

The fault in the practice of the teacher above described is not in her directing the children's attention to certain facts by means of the experiment she brought in, or in her asking for observations the children had previously made. Her fault lay in her treatment of the statement, "Heat turns water into steam." Leaving aside the way this was led up to and suggested, as soon as expressed it was pounced upon and stamped as right, evidently because it was the statement the teacher had been looking for. All other statements as to cause she was evidently prepared to ignore or reject. This one she really treated as a proved conclusion, and not as a working hypothesis which, in order to play its part, ought to have been definitely related to the previous facts that had been mentioned, and should have been expected to stimulate the observation of new facts and the production of rival hypotheses. When something of the latter kind is not done, the children feel that the exercise is a sort of guessing game, a conundrum to which only the teacher knows the answer; and even after they have obtained it they are left in such a position that they are not able to defend their conclusion. The procedure in such a case may review facts of observation and put readymade conclusions into the children's minds, but it fails to give them the independence and self-reliance necessary to treat novel data, which is an essential of inductive reasoning. To get this independence some wonder must be aroused in the child's mind. The question, moreover, must be put in such a form that he can get the answer by a new search for facts either directly observed or obtained through witnesses that he has good reason to believe are reliable.

"To what extent can children reason at a given age?" is a problem which ought to be conscientiously studied by every teacher. This is not usually done. The question is much more frequently settled beforehand by saying, "We do not expect children to reason so at this age," or "We now expect them to be able to reason out this or that for themselves."

Real reasoning of an independent character is frequently regarded as too unattainable for ordinary children and ordinary teachers. Reasoning is much more truthfully and profitably to be regarded as an instinct of a very fundamental kind, — one which is found to a certain degree in many of the lower animals and at the beginning of mental life in the child. It is in its rudiments, as Dantec says, "the hereditary résumé of ancestral experiences covering thousands of ages during which our ancestors rubbed up against the outside world." The early races of men did

not fail to reason. It was by means of their reasoning that we have the present advantage of civilization. The invention of fire, of various tools, of the first canoe, the discovery of death as a natural fact, etc., represent greater triumphs of reasoning than many of the more elaborate inventions and conclusions of the present day, which would, moreover, be impossible without their early forerunners. We should expect reasoning of a certain kind quite early instead of late in the child's development; and if we observe the child out of school rather than in it, we are frequently struck not only with the persistence of his inquiries and investigations but with the extent of them. The child likes to reason, and it is by means of his reasoning that he develops.

This reasoning, however, has some features of its own. Like the reasoning of primitive people, that of the child is necessarily related to his experiences, and he must not be tested on data which he feels do not have a direct bearing on his interests in life. These interests are of course much less complicated than those of civilized adults; but within his narrower although gradually widening range, and applied to objects he can handle, his conclusions are quite likely to be correct. His reasoning is simple because his experience is limited, not because his logic is defective.

If this is true, the part of the science teacher would be to widen the child's experience while keeping within the grasp of his independent reasoning capacity. We are not really widening the child's experience in this sense when we merely interest him in facts which are given him readymade, without inquiry or hypothesis. Many children, if asked what shape the earth is, will say, "It is round"; but if one enters into conversation with them and finds out

their actual point of view, one soon discovers that they do not believe it is round at all. The facts they observe go against the hypothesis, and they are sufficiently truthful and sufficiently logical in the depths of their minds not to admit the unproved statement, however glibly they may conform outwardly to the demands of the teacher or the adult world. A great many things that go by the name of science are of this hearsay type.

This does not mean that the child should repeat the whole history of the race and find out everything for himself without the advantage of stored experience. Quite the contrary. To be able to sift evidence offered by others is a necessary phase of investigation, but the criterion of any such process is actual primary experience. If one is really reasoning, this very reasoning will itself decide in any given case whether it is more economical to get the facts directly or by the cross-examination of witnesses. If the child is to be helped to reason, it is part of his training in judgment to decide how much of one method and how much of the other is suitable in various situations. If the child is to gain any power in reasoning, he must be allowed to use the reasoning power he already has, and must not be told by the teacher in the cases chosen that this or that is right or wrong. He must learn to study the facts themselves, rather than to be able merely to repeat what teacher or text-book says.

The main difficulty, as above suggested, is to get down to the child's real point of view, to go with him as far as he is able to go, and not to force him to go farther. A little four-year-old girl, walking with her father, came across some toadstools growing in the woods. "Oh, look at the little

tables!" she said. The teacher who cares neither for science nor the child's point of view, if asked at this point what she would do or say, is likely to give the reply I recently received from a teacher, "I should tell the child as quickly as I could that they are not tables, but toadstools." To follow the child's lead and get her whole point of view, one would need to say, "Yes, let us look at them." Wonder is a main ingredient in the child's state of mind at this juncture. If the father feels some of this wonder himself, it will be easier for him to get the child's point of view. "I wonder how these little tables came here," she says. "Perhaps there are some little people who put them here," her father says, guessing at what she means. Both father and child are working on the same stream of thought, and it makes little difference which of them expresses the thoughts that come. The father may express the child's thought, or the child may express her own. The father may even express his own thoughts in so far as they are not accepted authoritatively. Let us trace a possible development, although many others are equally possible and some perhaps more probable. "If there are little people, I wonder where they are." "Perhaps they hide in the daytime." "But all these little tables are not alike; here's one that has a top like a ball, and not like a table." "If the little people come out in the night, or when we're away, I wonder if we could see them." "I am afraid they might hear us coming and hide." "I wonder what they use the one like a ball for." "What do they make their tables out of?" "Well, let's go now, and we'll come back and see them to-morrow." "Why, here they are, and the round one is flat like the others. The little people must have been

here." "Let's take another round one and put a box over it and big stones on top, so that the little people can't move it, and then let us leave it and come back again." "Here's the box again and the stones on it, just as we left them." But when the box is taken off, the child sees the little flat table just as before. "It can't be the little people. It must be something else. Perhaps there are no little people," etc.

We have imagined the latter part of this experience, rather than kept, as we have done in the other instances, to actual cases, because the mental picture of what may happen is necessary to the teacher, and an instance of it is not out of place. No doubt such a piece of imagination is visionary; and if the teacher intended to make this vision come true in its details, or expected the child to walk along this path and fall into this particular trap, as Rousseau would doubtless have suggested, he would be missing the whole drift of the present argument. If, at any point, either the child or the teacher, working in the child's stream of thought, can get a hint of a more direct way to a satisfactory explanation, it should be adopted at once. All real short-circuiting is intellectually an advantage. We have here, however, the case of a child only four years old, who, we have presumed, has not yet attained a conception of growth as applied to plants. This should not seem strange when we remember that the Indians of the Hudson Bay region could not be persuaded to plant beans because they had never observed and could not believe that plants grew from a seed. If this is the experience which will yield a conception of growth strong enough to meet the other natural hypotheses in the field, then we should

not be devoting too much energy to this work if twice the time needed in the above process were required.

At the same time, whether a child reaches a given conclusion to-day or next year is not the most important point. The important thing is that he makes a real advance, and not an illusory one; that the old point of view really changes into a new point of view for good and sufficient reasons and because of facts that can be obtained. To force him to change it is like committing an assault upon the child. It is not helping his reasoning power, but killing it. That the child should remain at what we call the mythical point of view for years is to be expected. If he doesn't care to take the trouble to help get the box and stones to prove or disprove his hypothesis, there need be no regret on the part of his teacher. The land of myth is a goodly land. The science teacher ought to know his way in it. It is not simply a land of imagination; it is also one of reasoning. When both imagination and reasoning get more vigorous, they become sharper and more skeptical, and both are carried to a higher stage. It is a process of growth.

The danger is that with our too prevalent centrally authorized, secondhand science, the power of growth is checked; and this so-called science becomes worse than myth, since it is not backed up by things as they appear, even superficially, nor does it offer an explanation of them capable of being defended by the pupil. Instead, it is hooked on adventitiously in the memory, useful only at times of examination for a grewsome display, and because such exhibitions are fashionable.

How can the teacher proceed so that he really gets the child's point of view and develops this along its own lines?

This is comparatively easy if the teacher is not obsessed by his own preconceived lesson plan or course of study, scheduled to pass certain way stations and arrive at the terminus on the hour of the day and at the season of the year duly stated in the time-table. To dispense with such an obsession, however, is not to get rid of planning: it is to make the planning larger and better suited to the mental growth of the child. An example of what can be done by mere beginners may be of benefit. The training class in a city Normal School recently attempted the problem of the lesson on steam already described, their main idea being to see to what extent the children could reason. Some of their experiments were tried in classes and some with little groups at home, with about the same result. In the case of the groups at home, the children were free to leave if they wished. "To what extent would my pupils stay with me if they were free to leave?" might be a very profitable test question for every teacher to ask himself. In the following report of one of these lessons, selected for its brevity and not in any way exceptional, the preliminary account of the way of approach is also inserted:

My experience in approaching children: A close acquaintance with a child and his ways is essential when trying to get good reasoning from him. When I began I did not think this necessary. I now ask as few questions, and these in as unoffending a manner as possible. In this way I get the children to take the part of the teacher, and find that they give eagerly whatever knowledge they have. Many a child's reasoning powers blazed forth with a brilliancy that was remarkable. The children's quaint sayings are full of conclusions drawn from an imaginative brain.

Experiment with steam: I put some cold water into a pan, and as I placed it over the gas I asked a child what she thought would happen. After thinking for a moment, she said smoke would come

off. When the water began to boil, she pointed to the vapor and said that was smoke. "Where does it come from?" "From the water," was her answer. "It came from the water because there was a fire under the water, making it burn." "Do you think that smoke is the same as the kind that comes from burning paper?" I asked her. "Yes, of course," she replied. When the paper was burned, she said that the smoke of the burning paper seemed thicker, drier, and did not burn her hand when she held it over it. "Smoke from the water was wet," she said. A piece of cold glass held over the boiling water showed that there was dampness in the "smoke" from the water; and by tasting the liquid on the glass, the child found that it was water. That nothing would happen when the pan of warm water was put outside the window was the child's theory. When the steam came off she said that the air outside must be making the water hot. I told the child to feel of the air and then of the water, and see if her theory was correct. "No, it must be the cold air made the steam show." As she said this, she thought that may be the same thing was true in the room. To her delight she found that it was, after having proved it by several experiences.

Another example shows the reasoning processes of the children in a more latent condition, and gives an illustration of social class management favorable to the cultivation of an interest in science; but it also shows the application of the scientific point of view and the building of hypotheses applied to the work of teaching itself. A pupil teacher of some experience in a normal training school proposed to give a lesson on certain birds to a fourth-grade class. He had prepared the lesson on Herbartian lines. The apperceptive masses were to be aroused by his questions on how many had seen birds that spring, what they were doing, etc. He would then bring in nests that he had collected, have the children examine them, and read some poems about birds. The application was to be the moral evil of robbing birds' nests, despite the fact that he was exhibiting birds' nests himself.

The lesson was really so good, and the pupil teacher so intelligent, that the superintendent of training thought it might be possible to get something better than this driedout Herbartianism into the young man's head. So he said to him something like the following: "What do you need these apperceptive masses for? Are they not simply for the purpose of understanding the new material, or making possible the new processes which you hope to arouse?' You are going to try to have the children braid together certain strands of experience which they already have, so as to make something new; or, to change the figure, their apperceptive masses are like little hands stretching out for something to fill them. The new experiences you hope for are the closer observation of the bird's nest, the wonder arising from this, and the love and admiration that will sympathize with the bird that made this little home. Do you think you need to go through so many preliminary motions? Do you think their little apperceptive hands are so benumbed that they need to have their joints elaborately stretched to get them to work? If a boy suddenly sees a bird's nest on the ground or in a tree, his apperceptive masses seem to work instantaneously. He doesn't need to call up in his mind all sorts of things. They are there already.

"Even if he had never seen a bird's nest before, there would be apperceptive masses, perhaps all the more eagerly stretching out for satisfaction. Questions would arise. What is it? What shall I do to find out? Let me touch it. Let me look at it on every side.

"The apperceptive mass you want is not simply previous knowledge, but it is that knowledge in an active, organizing state. There must be intention or will in it. Something to be done about it is the first consideration. You do not want this only at the end of the lesson; you want it even more at the beginning. And surely you do not think that the mere will to pay attention to whatever may be 'presented' is sufficient. By the way, what was it that started the idea in your own mind to give this lesson?"

The young man replied that he had seen some birds building their nest in a small tree a little distance from the school, and this was what made him think of it.

"Excellent. Why not tell the children this to start with, and say what now comes into my mind: 'I wonder if any of you children could make a bird's nest like the one I saw.' Now go and think that over and see if you can imagine what the children are likely to reply."

He returned the next day, and had imagined quite a variety of things that might happen if he asked this question. "Well," said the superintendent, "all of these lines of imagination are good hypotheses. They are all good lesson plans, although they do not seem to have the usual Herbartian earmarks projecting too strongly from the head. Which of these are you going to follow?"

The young man said that he could not say, — that it was a problem which depended on the facts, or on what the children would do or say, — but he felt that he was more truly prepared from a pedagogical standpoint for having thought out not one cut-and-dried course but a considerable number of mere hypotheses. He also made his preparations of material, books, etc., to cover a number of different possibilities, and when he started his work he found that several of these had been correctly anticipated by him, although new ones developed which he had naturally failed to foresee.

When he got before his class and asked his question, he had to wait a little for the answer. But a brilliant flash of silence is sometimes a relief in the schoolroom. One boy finally said: "I don't know about it, - you see the birds have bills and we have only hands; but if I had a needle, I think I could do it." Some one asked: "What kind of nest is it? Where is it?" The teacher told them the exact place. "Why can't we go and see it?" they said. The teacher agreed, and a short excursion was forthwith planned. This was something the teacher had thought of in the list of possibilities, and a ladder had been placed near the door of the school. The children carried the ladder over to the tree. There were about twenty-five of them, and only one could go up the ladder at a time. The teacher pointed this out before they left the schoolroom, and asked what they would do during this time. A plan was adopted, suggested by the teacher, that as soon as a pupil came down from the tree he should write a list of all the things he saw that the bird had used in making its nest, and that afterwards all could compare what they had written. No plan was made for those who stood around before they mounted the ladder.

After the nest had been seen, nearly every one thought that it would be a good thing to try to make one, and then some one said: "The bird must have got his material near here somewhere. Let us hunt around and see." They did this, and soon collected large quantities of dry, dead grass, which they raked out from among the new grass coming up; they found bits of string and a horsehair or two, and finally, some distance away, they came upon a large bunch of excelsior which they concluded must have been the very one the birds had laid under contribution.

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The next day every one was ready to make a nest, and the teacher had provided little branches of trees which he had stuck in every ink-well aperture. But one of the children proposed that they should go outside and stick the branches in the grass, where they could work better, and that they should work two by two. This was not to imitate the birds, but simply for convenience—a case of coöperation and division of labor which proved wholly successful. The teacher had provided also a nest belonging to the same species, which the children could examine when they wished. They finished very good nests in the half hour. Some of them were firm and well modeled, and at a little distance could hardly be distinguished from the original.

In the next, or third lesson, the teacher asked them if they wished to know anything more about the birds whose nests they had been studying, and a large number of questions were asked. In asking these the teacher got an opportunity, sanctioned by the class, to read at least one of the poems he had in mind, and to impart a great deal of information about the eggs, the probable number of this species in the locality, their winter quarters, their enemies, etc. The children were so much interested in the work that of their own initiative they proposed making some more nests of a different species.

Work of the kind just described starts with the initiative of the teacher, but runs out immediately into work which is largely coöperative and self-organized. But when fully recognized, self-organized groups, working more or less independently, are permitted, the point of view of the children is perhaps even more easily obtained. As an example of this I may cite the following case. A group of these

third-grade boys came to the teacher, saying that they wanted to find out if ants could hear. They asked her to give them a half hour of the school time which had been set aside for such purposes. They had provided themselves with mouth organs, etc. The teacher considered that the half hour would not be wasted, and after hearing their plan, and perhaps offering some criticism and advice, gave them permission. They reported that they could not decide. They had counted the ants that came up out of the hole during the sounding of the various instruments, and found that there were about the same number as when there were no sounds made, although one boy claimed that there were a few more and that perhaps they could hear. But while they gave up this problem, they had found another. Whether ants could hear or not, was a question which could wait for solution; the point of interest now was whether they "went around like dogs, by smell," and the group asked for more time for this investigation. It was the springtime, when the ants came out and moved around their holes for a few hours only, in the warm part of the day. The boys chose a hole near a large flagstone on which they marked with chalk the course of each ant that came out of the hole. They made a map of this on a piece of paper in order to show the rest of the children in the class. After the ant had gone a certain distance they touched him, and in many cases he went back into the hole. They found that when the ants were out about two or three feet they did not go back along their track, but when a longer distance from the hole they did. The latter observation supported the hypothesis of the boy who thought it likely that they "went around like dogs," while the former observation went against it. As the hole

was lower than the flagstone, the hypothesis, that as the ants came near they saw the hole, was excluded. The boy who advanced the first hypothesis said that close to the hole there might be lots of tracks made by other ants which had not been marked, as there were a great many more ants moving around near the hole than farther out, and, in harmony with this, although the returning ant did not follow his track, yet he didn't go straight to the hole either. Farther out there might be but one track and this the one which was marked. The theory of smell was accepted as demonstrated.

They returned, however, with still another problem. They had been poking sticks down the ants' hole, and wondering how far down it went. Some weeks before this they had been molding candles in illustration of early New England life, and one of the boys said, "If we had some candle grease and poured it down one of these holes, and then dug it up, we would see where it went to." They expressed this to the teacher, who helped them to get some paraffin. They thought they ought to have enough, and provided themselves with nearly a pint. They melted this over a spirit lamp out at the ants' hole, meanwhile preventing the ants from going in. When the paraffin was melted, they poured it down. Nearly the whole of it disappeared. Then they commenced to dig the cast up, carefully following its branches in every direction. The discoverers of Herculaneum or Pompeii probably had no greater pleasure than these boys in unearthing their buried city. They broke the cast somewhat, but put it together as best they could, took it into the class, showed it and explained it, and later had a photograph made of it by another group of boys who were organized as a photographic group.

Whether Tarde's hypothesis that all reasoning is social is correct or not, there can be little question that social organization greatly stimulates the process by giving the individual reasoner both the help of criticism and the sense of social serviceableness in case of success. Although this whole chapter has been a plea for what is called independent reasoning, it should be realized that what is aimed at is rather a displacement of the exclusive approval of the teacher for the broader social interest and approval of the whole class, including here the child within the heart of the teacher. The judgment of his peers, even when unfavorable, cannot be dispensed with by any reasoner. If it is difficult to prove that it is always society which reasons in and through the individual, at least it is plain that he reasons best who is in free contact with a social environment sufficiently close to his own level to permit of his making and unmaking its opinions, rather than being constantly dominated by a semi-supernatural being who is always right - even when he isn't.

And yet how differently "independent reasoning" has been interpreted by many teachers. It seems to have been thought that the direction, "Reason this out by yourself, — do your problems without any assistance," represented the essence of good pedagogy in the matter. It does not seem to have been generally realized that a social motive on the part of the child is necessary for the best results. Independence is in reality an outcome of interdependence, and becomes differentiated as a special process only as a social economy. Every individual should, of course, carry any process or product as far as he can without personal waste of time and energy, before he submits it to society

either as a service to them or in the hope of getting help himself. But the object of this is social, and the social reactions of those he appeals to are the best corrections of a tendency to be too dependent on others. The limits of this dependence and the measure of economical independence he can only learn from experience. To force and exaggerate independence beyond the social feeling of one's peers is to make it false and vain, and leads to egoism rather than to true strength and power.

Space does not permit us to deal with all the possible or even practicable opportunities for reasoning in the schools. A few words may, however, be permitted on arithmetic, which is a kind of science, and which has long been supposed to be useful in educating the power to reason. There is little doubt but that this subject ought to offer great advantages in this direction, and there is equally little doubt that it seems to fail very largely in producing the expected results.

Several years ago the present writer, with the help of some of his pupils, examined two schools in arithmetic. Thirteen hundred and fifty children, from the third grade up to the eighth, were taken, one after the other, into a separate room, and handed a tally register capable of counting up to a thousand. This, as the reader knows, is constructed, although only about the size of a large watch, somewhat like the register for ringing up fares on the street cars. The children were interested in handling the tally register and experimenting with its power to count. If they did not develop this interest spontaneously, they were shown how the instrument worked.

The register was then set at a number between two and three hundred, which did not end in a zero. A watch was pulled out, and the child was told that we wished to see how many strokes of the little lever he could make in a minute, but first he was asked to read off the number with which he began. If this, for example, was 232, the figure was written down in the exact middle of a sheet of paper fourteen inches square. The child was then told to go ahead. As the reader will suspect, it was soon spread around by the boys and girls that they were being tested for their rapidity, and each was anxious to do his best. No word of arithmetic was mentioned to either teacher or pupil.

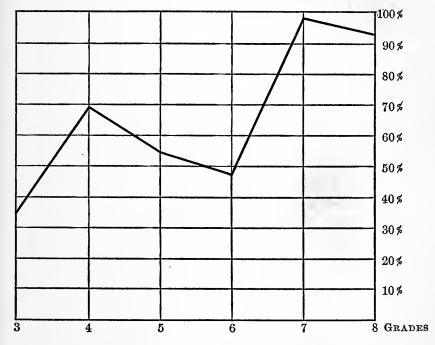
When the minute was up, the child was stopped, and with apparent carelessness the pencil and the paper with the record were pushed over to him, and with the last record of the tally register in his hand, he was asked, "Well, how many have you done?" Except for a few decimals, the examples never went beyond simple adding, subtracting, multiplying, and dividing, but examples of all these were found. At this rate, without any intelligence, and from a calculation of mere chance, twenty-five per cent of the cases ought to have been subtraction, but as a matter of fact the percentage never fell so low as that. The table on the opposite page gives the percentage of pupils of each grade who put the larger number above the one already written on the paper and subtracted the smaller one from it.

The question of why the drop occurred in the fifth and sixth grades is not so important. It came out in both schools, but was greater in one than in the other. Doubtless a still larger number of children would tend to flatten out the irregularities of the curve considerably. The important fact is the total number who divided, added, or multiplied, instead of subtracting. It would seem as if the work in

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arithmetic had not produced a great deal of gumption or reasoning power in the pupils when a simple problem of this kind, although a little outside the stereotyped school requirements, produced such disappointing results.

The trouble is evidently at one point. The experiment requires the pupil not merely to solve, but to frame the problem to himself. He has not simply to answer the



question; he has to ask it. He needs to make some kind of hypothesis as to how he is to go to work, and if the hypothesis is to be a good one, he must compare it with other possible hypotheses and submit them both to the reasonableness of the results obtained. The children who were examined probably had had little practice in this kind of thing at school. Instead, they had probably, for the most part, worked out examples after they had been shown how

to do other examples of the same kind. This tends to build up a habit which is often wholly unreasoning. The essence of reasoning is lost if the original question or hypothesis is not developed.

It seems plain that children's work in arithmetic ought to be derived much more largely than at present from their own needs and their own spirit of inquiry (cf. case of arithmetic in cooking group, page 109). If this is done, the impress of their actual environment will usually be found in the questions they ask. An instance of this may be cited from the work of a seventh-grade class in a small town. This town is supplied with water from a standpipe, around which the children had often played, and which had aroused their admiration on account of its large size. When the teacher asked them if they had ever wondered about anything that perhaps some calculation could solve, some of them said that they had wondered for a long time how much water was in the standpipe, but did not see how they could find out.

The teacher did not take it upon himself to show offhand how this could be done. It may be that he was not very certain himself. But since every one was willing to look into the question, he proposed that they study the problem overnight and see how far they could get with it. They knew how to measure cubical contents if the figures were rectangular, but they had had no experience with cylindrical bodies. The problem was to invent a method, if possible; or, if not successful in this, to enumerate as many of the facts as they saw to be necessary.

Next day all of the class thought it would be necessary to get the height and the diameter. An excursion to the standpipe was made, and the height was obtained by measuring the lowest sheet of cast iron of which it was built and counting the number of sheets to the top. The breadth was obtained by measuring across the shadow cast by the sun. These methods were, of course, invented by the pupils. Some one measured the circumference, not because he knew what to do with it, but because he thought it might possibly be needed.

At this stage the problem was laid by for some days, no one seeing what to do next. Then an hypothesis was brought up by one boy. If it were a rectangular figure of the same diameter, the contents would be so and so, or if we cut off the corners of the rectangle and added the opposite corners together, we could then subtract two of these new rectangular figures from the first mass. This, at least, would come somewhere near the contents, but it was not very satisfactory.

A couple of boys had meanwhile been experimenting with a roughly cylindrical piece of wood. They split it longitudinally and piled it as cord wood is piled, and then they saw that if they could only make the pieces fit together, the problem would be solved. A piece of wood was split into quarters, these divided again and again, and the pieces piled together so that they fitted to each other like wedges. After doing this, the boys saw at once that this pile had a height equal to half the diameter, a width equal to half the circumference, and a length equal to the original length of the cylindrical piece of wood. The application of this bit of experimenting to the standpipe, as the reader sees, was a very easy matter.

In this work the teacher criticised hypotheses and offered suggestions only in the spirit of self-organized work, without

expecting them to be adopted, and without assuming that the problem would ever be solved, or that he as teacher was responsible for its solution; nor did he need to say when the work was done, whether the answer was correct or not.

Science and arithmetic, like reading and writing, are in reality arts of life and of the school. It is, moreover, the art of reasoning, rather than the dry facts of science, which is best capable of being taught. When effective social accomplishment of some kind is the aim placed before pupils, rather than the passive reception of facts, not only does this treatment inspire pupils to better efforts, but permits the teacher to act as their helper and adviser in the great art of living. Society and the teacher may act as causes in putting before pupils preferred ideas and demands, but not until the pupils can reciprocate, regard themselves as creative causes, and find a social environment which they can treat as an effect as well as a cause, can these very ideas and demands on the part of society be comprehended and willingly obeyed. To create society is as necessary as to be created by it.

CHAPTER IX

READING, LANGUAGE, AND LITERATURE

The gap between life and the school is nowhere more apparent than in the teaching of reading, language, and literature, and yet there are no subjects which afford a richer educational reward when the aforesaid gap is closed up or eliminated. Ordinary thinking on the subject of the teaching of reading has got so far as to recognize that learning to read means the use of a language for the eye, and that the way in which a child learns the spoken language may throw some light on the way in which he can best acquire the written one. W. T. Harris, for example, has convincingly shown that a large part of the work in school consists in changing the ear-minded pupil into one who is eye-minded.

Reading means what may be called eye-mindedness, but it is not eye-mindedness to the neglect of ear-mindedness. With hearing people a written word is always based on a spoken one, and retains its connection with the auditory experience as a part of the meaning lying back of the symbol which is seen. The acquisition of eye symbols is thus not a substitute for auditory symbols or auditory experiences. It is an extension of them which reacts upon and actually increases the refinement of the auditory experience.

For example, a person may read silently a poem which he has never before heard, and notice rhythms which he

never previously experienced. It is evident that there is here an auditory experience underlying the recognition of the symbols for the eye, and that the silent reading of the poem recasts this plastic auditory material and creates something new out of it. When one reads a poem in a foreign language which he has never heard, although he may understand the text, he usually fails to get the pleasurable rhythms that should belong to the exercise. This is not because he is without auditory experience of a mental character, but because he has built up uncouth auditory experiences which serve as stepping-stones to the understanding of the visual symbols. This may have been done without any outward sounding of the words. Put in another way, he reads the foreign language in nearly the same way that he would read his native tongue. The eye-mindedness demanded some sort of ear experience as a prerequisite.

When deaf people learn to read, the case is different. There is no preliminary ear-minded experience. The meaning of the visual symbols is obtained as an extension of another class of conventionalized signs largely composed of movements which are built up by a direct association with objects, actions, and various experiences of life.

If this is true, the attempt to teach hearing children to read by the direct association of the visual sign with action, objects, etc., must be characterized as a mistaken effort, — one, however, which has in some quarters been taken seriously and practiced in the schools. The fact that in such conditions the children do learn to read is no disproof of the futility of the theory. If, by extra enthusiasm on the part of the teacher, they may even learn as quickly, if not more quickly than in other ways, there is still no disproof. The

teacher, for example, holds up an apple, or performs some action, and, without saying anything, writes the word apple or the name of the action on the board. What a fond illusion for her to think that a direct association has been made between the visual idea or impression of the apple and the written word! What happens in the child's mind is probably some form of inner conversation: "What does dear teacher mean now? Oh, yes; she wants us to know that what she has written stands for apple." The inner auditory experience has been revived, somewhat clumsily, no doubt, but with sufficient effectiveness in most cases.

These current illustrations of perverse applications of the laws of association will serve to show the direction of their true use, but no dependence on association alone will serve to solve the problem of reading for the teacher. The development involved in learning to read means a great deal more than an added layer of eye-mindedness. The problem of language is deeper and more comprehensive, and directly involves character and personality, social relationships, power of interpretation, beauty, utility, and need of expression. These somewhat vague conceptions are all controlled by the idea of social relationships. For the student of the individual child this resolves itself into the necessity for a stronger motivation, which, as Mr. Reeder says in his excellent monograph, constitutes the next step forward. The aim of the present writer is to show that this motivation is principally social, and that service gladly given and eagerly received is the mainspring of progress in learning to read.

As to its origin, spoken language must be inferred to be primarily a social phenomenon,—a means of communication.

It could only occur when a considerable degree of social organization had already become a fact. As soon as it appeared, there was nothing that acted more powerfully on social combination itself. Spoken language became the vehicle and foundation of all kinds of social action. Thinking was forthwith lifted from the animal stage of the percept to the human one of the concept. Such thinking is necessarily the outcome of social relationships, and involves the use of a conventional sign understood by others, and representing no longer an outward object, but an aspect or portion of it capable of being recognized in other objects of an entirely different kind.

If we follow briefly the development of a child's speech, we shall see that, while it is impulsive and inventive, it is also socially pragmatic or experimental at all stages. From the beginning it involves a social environment. It is by noticing the effect upon others of the sounds he makes that the child slowly learns the use of language as a tool, and only in proportion as he can use it upon others does he appreciate its effect upon himself.

Children, when learning to talk, begin with a twittering of vowel sounds, and very soon add the guttural consonants. They readily respond to adults in their own way by the ninth week. This is as yet nothing more than a kind of recitative, more like music than language, and reminds us of the fact that musical sounds are probably a precursor of speech in the development of the race (1). At about the same age, or a little after, they also initiate sounds for the purpose of producing an effect on those around them. By the next month there is an improvement in the musical qualities and an appreciation of rising and falling inflection,

but yet without words. The consonant sounds requiring the front of the mouth and lips are now added; and it is to be noted that at this period the child is experiencing an irritation of the gums due to the cutting of his lower incisors, which appear about the seventh month and take from one to ten weeks to erupt. It would seem likely that this is what brings in the use of the labials, which are often made rather by the gums and lips than by the lips alone.

It is not until these sounds are pretty well established by practice that the brain is sufficiently developed to associate experiences with the sounds in such a way as to attach specific meaning to them (there is, of course, some meaning as mere sounds from the time of the first response). The first real words occur about the ninth month, when the upper incisors are giving trouble. Bye-bye is sometimes a first word. Di-di, pa-pa, and mam-ma are often the first. These are words requiring the use of the frontal part of the mouth. Let us study the possible origin, in the experience of the child, of one of these words, and we shall see that its use is probably neither a matter of pure imitation nor of invention, but a process requiring the coöperation of both the effort of the child and its interpretation on the part of adults.

Let us take the word mamma, which many children use as a name for "mother." The usual view is that they hear this and imitate it. The name, however, is widespread in many languages, and may have some deeper origin than foresight on the part of parents, who, realizing the need to be called something, invented this word as a suitable name. The exceptions throw some light on the process at work. A child recently reported to the present writer called his

mother ga-ga, a word which was accepted and used in later life as a pet name. I found that this child began to cut his front teeth quite late. Now, why did this child say ga-ga instead of mamma? A reasonable hypothesis is at once suggested. The probability is that this child was still saying ka-ka, ga-ga, etc., when most children are engaged on labials. Let us continue the hypothesis and see how it will fit the facts which may have been present at the time.

The baby is lying in his crib after awaking, and cooing comfortably, when hunger or some other irritation disturbs him. As this increases slowly, the cooing changes in character, without any intention, but simply because there is an overflow from the center of the disturbance into the processes already going on. The noises become what the adult calls more fretful or angry, and at the same time louder. This naturally brings the mother. If the baby has not yet arrived at the crying stage, but is still making rather loud guttural sounds, the mother, as she rushes in, imitates these sounds: Ga-ga, mother's blessed ga-ga," etc. This is doubtless repeated many times. So far the sound is not yet a name, but might as well be one for the baby as for the mother. But presently the baby associates the noises he makes with the appearance of the only object of the environment which relieves his disturbance. To bring in the loud sounds sooner, even when the disturbance is very slight, is easy because the pathway is already formed. This may, indeed, happen automatically, without the baby's intention, but when it does happen, the mother notices the difference. She rushes in more quickly because the baby seems to be calling her. She repeats the call word with an almost festal celebration. It becomes attached to herself in

the baby's brain, and may afterwards be used with definite intention because he knows the results which will follow its use.

So far there is only the preparation for a concept. The conscious process includes too much, and in another way too little. Ga-ga means nothing more than relief from disturbance. Others beside the mother will answer this, and at first the child may call any one ga-ga. By a similar process, however, the particular kind of relief, and, later on, other things besides relief, even repression or correction, become added to his experience, but always associated with the original germ from which they have grown. The word stands now for a whole complex of social relationships and intercommunications which spring to the mind as an apperceptive mass whenever it happens to be thought or spoken. Still later it may be applied to other mothers, and be used as a real class word, defining certain relationships and excluding others. This, at least, happens readily in cases where the same kind of process yields the word mam-ma instead of ga-ga, and where the child finds other children using, with a different personal application but with a similar meaning, the same word which he himself has learned to use. The finishing of the word, and the finishing of the concept behind it, requires a social environment as much as its original inception. In the development of its latter aspects as a class word, the experience required is the intermingling with other people, particularly those on the same level, and the interpretation of their slightly different standpoint. It requires a community as a presupposition. Both the language and the thinking are social functions.

In this process the uniqueness of the individual's experience and its essential solidarity with the experience of others play an equal part. Neither of these aspects, however, can be developed without actual social contact; that is, without the expression, and at the same time the reception, of another's point of view. Conception, as Baldwin claims, may doubtless be viewed as the motor side of thought, at least in a social being. Discussion of ideas that people actually have is thus necessary to the development of both thought and language. The object of discussion, moreover, is not simply to find the similarities involved. No working coöperative similarities of experience are found without also revealing differences. To find the point at which each can take hold in his own way of the social rope, and pull with others for the good of all and the good of each, - this is the aim of education in language as in other spheres of culture.

Unfortunately many teachers seem imbued with a different notion. Their idea of teaching is not one in which the thoughts and characteristics of the pupils are to be revealed, and to some extent exchanged, but one in which the teacher's thoughts—and ironically enough, these not always his own thoughts—are expected to play an enormously predominant rôle. Language is thus, like other subjects, imposed from above, and even when the pupil is called upon to "express himself," he finds that he is communicating nothing of interest either to the pupils or to the teacher. He is simply exhibiting his paces in order that he may be corrected by his master. Nature, however, saves the situation for the social spirit, if not for the refinements of language. Many children who know the rules of grammar

perfectly well would be ashamed to follow them with their comrades. Pupils who can write elegant themes for the school drop most of what they seem to have learned when they write real letters, and during their holidays they carefully avoid reading the same kind of literature which they have been led or forced to read at school.

To advance, however, to the transition from spoken to written language. The question of how or when children should begin to use written or printed language is usually settled for them without much reference to what they feel they need. No doubt any single individual, so long as he is isolated from others, would never wish to extend his language to the visual form. But he is not isolated, and in a school he ought to be favorably situated as regards social helpfulness and mutual coöperation. The difficulty in teaching children to read even at the early age of five or six is not, however, so great at the beginning as a little later on. The child brought up in civilized surroundings is frequently eager to learn to read, and will go through a good deal of drudgery, and even unnecessary drudgery, to get hold of a power which he sees used by every one. He already realizes a good part of the social importance of the achievement. This, however, tends to be somewhat abstract and external, appealing rather to his social vanity than to any deeper feeling of personal pleasure and satisfaction, or increased power to serve others. It is because of this inefficiency of motive that reading often becomes a drudgery.

There ought, therefore, in the first place, in everything the child reads, to be some immediate satisfaction. If he works hard on a sentence or a paragraph, he ought to get something out of it. Apart from his general satisfaction

in overcoming difficulties, and his satisfaction in the work as bringing him nearer to his desire to read like grown-ups, he should feel that every sentence or paragraph is of value for its own sake. It ought to stir a desire, satisfy a need, complete a picture, give valued help in his play, or be of use to him in a more immediate way. The succession of sentences or paragraphs ought to follow in such a manner as to help one another and build up his growing image. In other words, the arrangement should, from the standpoint of the child, be as artistic and dramatic as possible.

Very much the reverse seems to be characteristic of most of the reading lessons in our primers, as well as of the other reading material which teachers use. I recently observed a characteristic scene in a first-grade class which will illustrate this feature. The teacher had made for the children a lesson on the squirrel, and had interested them by a little preliminary talk. She then wrote the first sentence on the board: See the squirrel. This did not require much work, and the children were ready for the second: His name is Chippy. There were two new words in this, and the effect of the sentence was stimulating and attractive. One little boy turned round to the rest of the grade (the class was standing up in front), and whispered the news with pleasure, — "His name is Chippy." It is easy to see that the suggestion so far is that there is to be something individual and interesting and real in what is to follow. Expectation is aroused. The next sentence was, His coat is red. The children attacked this courageously, but when the meaning dawned on them there was a decided loss of interest, and the teacher had to begin to call upon them to stand straight and look toward the board. The reason of

this seems obvious. The sentence did not carry out any of the expectation that had been suggested by the previous one. It was flat, stale, and unprofitable. They all knew that the squirrel was red. They had seen the picture of it, and even if they hadn't, it was not important. As to its being a coat instead of a skin or fur, this was a figure of speech that was evidently commonplace. They began to feel now that there was "nothing doing," and the expectation of a romance was blighted. The next sentence, His tail is bushy, completed the debacle, and there was hardly any recovery at the next sentence, — He lives in a den, which, if it had been introduced earlier, might have seemed alluring. As this lesson went on, it became plain that the children were right, - there was nothing in it to reward them for the labor expended. Children are, after all, like other people in this respect. They do not object to work, but they want the work to yield a return proportionate to the effort involved.

One essential thing about all interest, and therefore about all reading and literature, as suggested above, is the expectation it arouses as to what is to follow. This is an important aspect of the development of attention and the will, and when it is neglected children are being taught to recoil from work rather than to meet it with courage. Even if they are forced, or led by extraneous motives, to do what is required, the reflection comes later that in itself it was not worth while. This is most disastrous, and is alone sufficient to account for the vulgar newspapers and other cheap reading matter which the masses educated in our public schools instinctively fall back upon when they are free to direct themselves.

Let us take a piece of reading matter suitable for a second or third grade, and see how this sense of expectation can be utilized. Let us suppose, moreover, that the teacher finds a certain number of the class who need some assistance in order to arouse their expectation. If the reader follows the lesson without skipping, perhaps putting a card over the lower part of the page and slowly sensing the meaning of the words printed in italics, at the same time imagining what is to follow, he will get an idea of what the children, who are compelled to read slowly because they are working hard, may be experiencing.

A frog saw two birds flying overhead.

The first sentence is never very difficult for any one, so that the teacher may pass on without remark. There are not likely to be any stragglers.

He called to them and said:

This distinctly arouses expectation, and in order to see that every one gets this, the teacher may ask, "What do you think he said?" The children will offer various answers. The teacher should be careful not to show that he approves or disapproves of any of them. These answers are only hypotheses, like the speculations we make at the beginning of a novel as to how it is going to turn out. If the teacher favors any of the answers, there will be less need for the children to read the next sentence in order to see for themselves who is right or nearest being right.

" Take me with you."

If none of the children had hit upon what the frog said, it may be still more interesting than if they had. This depends upon whether the story goes the children's imagination one better or not.

"How can we?" said the birds. "You have no wings."

What is going to happen now? Perhaps by this time something further on than the next sentence, something of the drift of the whole story, may be imagined by the children.

"I will show you how," said the frog. "Here is a stick. Let each of you take hold of one of the ends, and I will take hold of the middle."

This, at least, raises the question of the success of the plan, and the children will readily speculate on how it is going to turn out.

The birds did as they were told, and then flew off with the frog, who held on tightly with his mouth.

If the children are already aroused and expectant, it would be idle to pile one thing on top of another and delay further by asking for the expression of their ideas. If the teacher sees by their looks that they are working well, with enthusiasm for the result, this is a good time to go right on without interruption.

As they were flying over a field some farmers saw them. Said one of them: "Look at those birds carrying the frog. What a good idea!" The frog heard this and was filled with pride. He opened his mouth to tell the farmer that he was the one who had thought of this plan, but in doing so he let go of the stick, and, falling to the ground, was dashed to pieces.

It is quite obvious that if this story should be illustrated by a picture showing the frog tumbling through the air while the birds are sailing aloft with the stick, such a picture would spoil rather than help the interest of the children. This might not be the case with adults, the

difference being that children are compelled to work much harder in getting ideas from the printed page than are people who have already learned to read. The pictures in most of our readers seem to be inserted almost wholly from the adult standpoint, and without consideration of the children's needs.

Anything that is more than commonplace in the foregoing analysis of reading matter for children is dependent on an application of the rights of social existence. Reading means that some one, namely the author, is talking to the children and telling them something they wish to hear. When they no longer care to hear it, the thing becomes an imposition, and trains the habit of finding ways to close one's ears. This is done at different mental levels. A child may be able to pronounce words and sentences, may even put in all the elocutionary twirls and twitches which the teacher demands, and yet have his higher hearing closed because there is no need that it should be used. It is also plain that permitting children to express their expectation of what is coming, and asking other children what they think of their surmises, is in itself a social process which results in extending the imaginative grasp and stimulating the interest of every child concerned.

Mere reading, even if conducted in a partially social spirit, is only the passive half of a completely social process. The procession of gaunt bookworms that crawls forth from the British Museum every evening when the doors close have acquired the reading habit, but very few of them have acquired anything else. It is a question whether the habitués of the dramshops are not having as good a time and getting as much out of their lives. If the

schools do no more for reading than to teach people to read, it may be said paradoxically that they are not even teaching them to read. Unless passive reading results in active power, even the first half of the process is incomplete. A man may read and hear the Golden Rule; may assent to it passively or theoretically; may think he understands it; may even regard it with religious adoration; but unless he uses it in the practice of his life, he will fail to get its meaning. The motor outgo, on the contrary, yields not only vividness to intellectual content, but actually increases clearness. Mr. Henry D. Lloyd's book, to take a recent example (2), evidently derives its insight as an expression of the Golden Rule from the test of action. All ideas, indeed, are but hypotheses, which must be tried out to be understood. Adults, with a wider range of remembered results in life, may not need to experiment so often in order to test the notions with which they are already familiar. It is frequently forgotten that children are without this experimental data, and that education is for the purpose of supplying this deficiency. Some things are, of course, instinctive, having been stamped into the nervous tissues by the forgotten experiments of the race. But if this summed up the case, conscious education would be as unnecessary for a child as for a chick. Most things of the highest and most controlling value are not so instinctive. Even the prejudice against lying is an acquired one in most cases, - when it is acquired at all. "Don't lie" is a theory until the child, either personally or by observation of others, has had some experience which has bitten into his soul. If, then, we are to apply the Golden Rule to children in the school, their reading matter must

furnish them with ideas which they can use, and which they care to use experimentally, in their present lives. The future application is a long way off, and, moreover, can be built only on a discriminating and voluntary use of present opportunity. Give us, O Lord, our daily bread, and let us not feed the children with stones.

The value of the motor side in all intellectual work has already been seen, but it is taken, for the most part, in an individualistic sense. The practice of teachers shows the result. They try to get some opportunity for the child to do something, and hit upon the profound device of reading aloud. Now surely his motor centers are being exercised! Or, after the story is read, they ask for a reproduction in the words of the children, and make this a "language exercise" by jacking up the children's words to the standard of the book. They may ask one pupil to remember one section, the next another, and standing them in a row, jerkily unravel the yarn and wind it up. Or they may mystically suppose the child to have some undischarged emotion, and get him to express it in painting or write it out in the form of an exercise, repeating as much as possible the story read. With the exception of the first device, these are called methods of giving back the story, and, if the teacher gets beyond the idea of mere memory training, are supposed to supply a motor reaction.

Now why does the child read aloud? I have asked several children, and they were surprised at the question. They thought it was obvious that they did so because the teacher told them to. A further reason came to some, namely, that the teacher wanted to see whether they could pronounce the hard words. Their attitude in both cases

was entirely passive. A few had a show-off feeling, and took it as a compliment to be asked to read, because it was a sign of the teacher's favor, placing them on a competitive eminence with their mates. It is obvious that in most class rooms children do not read aloud because they are in possession of some idea which they have derived from a book and wish to communicate it to some one else. This is, however, the principal social basis for reading aloud, and is the reason any sane adult would have if he wished to read to any one else or any one else cared to listen to him. In school, on the contrary, the rest of the children are provided with books, and have often prepared the lesson at home, while the teacher, of course, knows the story beforehand. There is no one to communicate any ideas to, and a spiritual vacuum necessarily results.

It may be said that elocution remains, including here pronunciation of words, inflection, pauses, rhythm, quality of voice, the erect position, the book in the left hand, or even gestures. No doubt these do remain, and some teachers make the most of them, but they are abstract and artificial, without content or meaning back of them. It is practically impossible to make oral reading effective unless the reader is guided by a desire to communicate something of interest. In some way a real audience must be provided, if reading aloud is to be made a part of a reasonable and social education.

The other devices above mentioned, consisting of giving back the story to the teacher, are also usually treated in an individualistic manner. With the possible exception, in some cases, of painting or drawing, the children have no direct and active interest in giving anybody anything

through their performance. There is no one to whom they desire to express anything. They would not go on with these things by themselves, and none of these actions will form habits likely to be sustained in later life. No adult, after he has read a story or an essay, is likely to sit down and reproduce it unless he has the intention of giving this reproduction to others who may be unable, or for whom it may be inconvenient, to read the material for themselves.

It is plain that, so far as these so-called motor reactions are concerned, the child is not directing them and that they are not motor for him. He has no feeling that he is causing anything. He is not experimenting. There is no social effect directly connected with what he is doing, which he can observe, correct, and thus shape nearer to his heart's desire. No eye is fastened upon him as he reads, greedy to hear the end of the story. The wandering glances of his classmates do not disturb him. No natural interjection is made, and at the close no voice is softened by emotion or alive with curiosity. The breathing is unaffected, and the funeral obsequies are conducted by the teacher alone. As for the further and larger experimenting which may be derived from the ideas of the matter read, this is, for the most part, supposed to belong to life and not to the school, and must be left to a vague hope in the future, or to what is sometimes called the individual conscience.

Merely to change the outward appearance of such practice, and to tell the child to read to his classmates while they close their books and listen, may not effect the results desired. The child may still not feel that he is causing anything, or making changes that are worth while in the minds of his fellows. This will almost certainly be the situation if

a story is read which the children have already looked over, while if one child reads one section of a new story and another reads the next, there will be a general lack of understanding and of synthesis.¹

The ethical and moral thing to do for every one who reads to another is to grasp the idea to be expressed, and to judge whether it would interest or benefit the person who listens. With adults the general value of the idea may be very quickly seized, and sometimes without reading the whole piece. That it is on a certain subject, or written by a certain author, may be enough in some cases. The next thing the reader must be sure of is that his listener is disposed to receive the message. He then proceeds, if he is a good reader, to grasp the subordinate ideas which the author expresses to him. His eye sees them coming considerably ahead of the words he is actually pronouncing, and his mind is still further on, with a degree of expectation, looking for the more important thoughts.

Meanwhile his voice is delivering the ideas which he has previously grasped. The operation is like a ball game, in which the author throws one ball after another of varying size, while the reader throws them to the listener. He is careful of the large ones and handles them so that they may be caught. To do this the reader must evidently observe his listener sufficiently to see what is happening, or even stop to inquire. This may seem complex, but it is probably not half so complex as what actually takes place.

¹ This will, of course, obtain to a greater extent in the higher grades. With the younger children the work done on every selection is greater; it should therefore afford a more complete picture or idea, and yield an opportunity of service done for the child who masters it and communicates its meaning to the class.

There is plainly enough in all this a training in judgment and ethics, but it is impossible to carry it out if it is not made a part of real, coöperative life processes conducted in the school.

A few years ago the present writer took charge of a reading class of high-school juniors, and made an effort to see what could be accomplished in this direction. The pupils were invited to give their ideas of what could best be done, and to describe both aims and processes. The aims were at first, as might be expected, very abstract, where they did not result from an attempt to pose. Gradually, however, real desires made their appearance, and with these, commonsense efforts to carry them out. The pupils began rather early to bring into the class things that they had read with pleasure themselves, to ask the class if they cared to hear them, and, after a good deal of home preparation, to read them aloud, and to ask for criticism or comment. The teacher was in a position to give advice during the preparation, and to join in the criticism at the close. It is needless to say that these functions were at first performed very gently indeed, in order not to frighten the pupils out of taking a full initiative themselves. Individual pupils frequently ran to specialties. One girl was always bringing in sentimental pieces, which she read with a great deal of feeling; and, strange to say, this feeling was reciprocated by many of the pupils. I saw tears in some eyes during the reading of pieces which left my own heart untouched. refrained from expressing my adult and presumably more cultivated feelings further than would be really welcomed by the class. One boy was a born humorist, and after the tears he occasionally set the class in a roar by some little

story which he had found perhaps in a newspaper, and which he told, and often acted, without reading.

Every one came to have an ambition to read as if he were speaking to the rest. Instead of general criticism, the reader sometimes asked the class for the succession of images they had received, or for the ideas and images which they had found particularly interesting. Very soon a daily programme had to be prepared in order to economize time and get the best order of the pieces presented.

After this degree of organization had appeared, some one proposed that where there were two or three persons represented in the pieces read, these parts might be taken by different members of the class, rather than that the single reader should be first one person and then another. They frequently took pieces written in indirect discourse, and turned them into direct address. Indeed, this was often done by the single reader as he went along, if by doing so he thought he could get more into the spirit of the piece or give a more vivid impression to his hearers. Very soon dialogue and dramas were brought in, one of the first I remember being the quarrel scene between Brutus and Cassius. By this time home preparation did not seem sufficient, and they voted to give part of the time to preparation in the school. For this purpose they broke up into several groups in different rooms or hallways, and planned and rehearsed their various presentations. During this period the teacher was in great demand, going round among the groups and giving help and criticism. The most important technical problems were frequently broached, the dictionary was in constant service, and even books on elocution were not despised.

Still later the pupils began to make stories for themselves from real life, and to read sketches or essays. These were not allowed, by the class as a whole, who had to listen to them, to occupy too large a share of the programme. Only the best survived. Some of these, however, were very good. One little dramatic sketch, which was impersonated by the author, and represented an experience which happened to him in a life-saving station, was particularly interesting and even romantic. In all this the teacher took part also, by presenting reading material which he thought would be interesting, and which he calculated would gradually raise the standard of the class.

This experiment was satisfactory as far as it went, and it was quite plain that the young people, while they enjoyed their experience, never lost sight of the educational purpose of becoming better readers. Many who had never had such an idea before woke up to its value and pursued their ambition with the greatest success. I say "as far as it went," because this reading class was not in such organic connection with the rest of the school that life activities going on in the other classes could be related to the new ideas derived from either the authors read or from the social practice of this class. That the pupils could read better and were a little more confident was perhaps the greatest value apparent in other classes. It was rather the life processes going on outside the school, in home and church and playground, that were most organically united with this work in reading. To get the best results the whole school should be allowed to organize on a social basis. The experiences of one class should be intimately connected with those of another, and the school itself should grow from the life of

the community which surrounds it. This can never be done by correlating subjects on a course of study, or in any other way put in from the top. It is growth from the roots which will yield flowers and fruit.

The experiment above described revealed other things than the powers of pupils to organize their own work. Instead of sinking individuality, their social coöperation was the very thing which brought it out. True independence is always a result of, and follows rather than precedes, a stage of interdependence. Both are desirable in education, but one is fundamental, the other accessory.

From the point of view of the individual reader, it was also brought out in the mutual criticisms of the class, that after he felt the most fundamental social relationship and was in control of the ideas to be delivered, the means necessary to carry out these prerequisites followed a certain natural order. The voice, or the book in the left hand, was not found to be the most fundamental or controlling factor. That which governed the rest was the position and motion of the body. Instead of adding on the actions to the word, the first thing to be thought of, or rather felt, was the physical attitude and the actions themselves. In reading, as in real life, these bodily attitudes and actions precede the voice. They represent to the others and give to the reader the kinæsthetic and emotional experience of which the words are an accessory accompaniment. A person does not say, "Give me the book," and then proceed to supply appropriate gestures. He turns his head, directs his eyes, leans his body, and begins to stretch out his hand a little before the words are uttered. He no doubt begins to get the idea before these things happen, but this belongs more

to the receptive side of the process, and we are here considering the art of delivery or expression. If these fundamental things are right, the words tend to take care of themselves, and to derive from the more passive bodily states the timbre, pitch, and melody which are suitable to the physical organism of the reader. A stereotyped position, such as standing erect with the heels together, obviously spoils the opportunity of natural expression, and indirectly prevents the reader from getting or giving the full meaning of what he is reading. When this mistake is once made (and this follows immediately from ignoring the social conditions of expression), there is nothing left for it but to supply stereotyped inflections, rhythms, and pauses, with other technique, imitated directly from the teacher. How often do we see children's natural grace of movement and the beautiful quality of their voices, which ought to be as different as the differences of their mental make-up and bodily structure, forced into elocutionary antics quite foreign to their real feelings or desires! Because they are not dealing with realities in the children themselves, except to override them, teachers do not even express their own individuality, but imitate the forms they use from others. A mannerism of inflection will thus run like a disease of fashion through a whole city. When all are alike, it is supposed that every one must be right.

With younger children, what adults would feel to be an excess of bodily expression is natural, and is to be expected if the social atmosphere is normal. Reading matter full of visual imagery and dramatic possibilities is most necessary for them. But with larger and deeper experience, the voice undertakes a larger share of the expression, and gestures

are checked. The significance of the whole paragraph, or of the whole speech, is more readily grasped, and its application to events and actions which lie beyond the present looms up larger in consciousness. The bodily attitude expresses a feeling of simple waiting for the point or dénouement of the whole idea. Emphasis of tone, or force, is moderated. More work is laid on the higher processes of association and judgment. President Eliot of Harvard is much admired by the present generation as a speaker, and rightly so. He hardly ever makes a gesture. His voice, although clear and confident, is almost level in its flow. Slight pauses and slight inflections form the principal means of emphasis. But even this style of expression has not lost its dramatic implications. It is still controlled by the test of action. It is full of purpose and vibrant with endeavor.

Reserved power is, however, the end and not the beginning. Immediate action and its consequences must be mastered first. Where these are capable of being controlled for social purposes, the more far-reaching effects may be experimented upon. It is needless to say that to imitate the mere form of a finished speaker is to satisfy ourselves with husks, and to prevent the development of a normal growth.

The foregoing analysis of both the receptive and the active side of reading has already thrown some light on its higher development in literature. That only is literature which speaks to people's hearts, and which they care to read and hear. To label a collection of authors, Fine Literature, and to apply this in small doses, suitable for rhetorical or grammatical analysis and philological research,

is to dishearten pupils and to remind them of a drug store rather than of the pure Pierian spring or of a well of English undefiled. This is an attitude which is fortunately passing away in our best high schools and colleges, and teachers, much more than formerly, depend on reading to the pupils. The next step will be to allow pupils to read among themselves, and to exercise frequently their own admiration and their own choice in what they read to others and in what others read to them.

As we have tried to show, reading and literature, to be of any service, must never get far away from the will or intention of those who read. It is also true that this expression must be a natural outcome of their emotions. What are the emotions which children experience, and which they suffer from when they are not controlled and educated?

Fear is certainly one. We have had some excellent studies of children's fears (3), but it would be hard to find much appreciation of these studies in our pedagogical practice. And yet every tragedy is a record of a fear that is overcome. To guide the soul between fear and love was Aristotle's formula for education. Perfect love casteth out fear, says the New Testament, but the fear must exist in order to be cast out. Death, sin, hell, and the grave are symbols which stand for something. A Scotch preacher once told me that it was his frequent practice to "shake his hearers o'er the mouth o' hell" before picturing to them the saving grace of redeeming love. Some such emotional curve, although not always representing thoughts so primitive and crude, is to be found behind every significant human endeavor. To be aware of risks and to

appreciate them to the full is a sign of wisdom and a stimulus to true courage.

On the other hand, to have fear and see no outcome, to be chronically afraid, expresses the depth of defeat. To be so cautious as to be afraid to stir or to take risks for worthy ends is a conservative attitude governed by a subconscious fear. To adopt the suggestion that there is no fear, no death, no evil, may be comfortable for the time, but it puts the realities of life a little further beyond one's personal control. Better the war song of the Norman as he rode along the ranks swinging his battle-ax in the air.

If it is a law that love casts out fear, chronic fear is only a state of arrest, and the proper development of the situation will result in happiness and power. We see this plainly in the tragedies of our great poets. But the small tragedies of children are often allowed to fester, and form points of departure for an organization of fear states which, although their origin may have been forgotten, keep on like "sunken bells" through the whole of their after life. Let us take the case of a little four-year-old girl who, when she went to bed, imagined all kinds of reptiles and other terrible creatures underneath the bed. Comforting words from her mother did no good. One night, however, the child imagined that four great lions stalked into the room. They took up their positions, one at each corner of the bed; they fought off the reptiles, and the little girl fell peacefully asleep. The next night the lions came in earlier; and with repetition the whole thing became a pleasant play, but not without the tang of fear from which it was derived.

It is evident that we have here the making of a poem, a drama, for which nature had finally provided the missing fifth act. When the chain of imagery is stopped in the middle, the spectator in the "private theater" is naturally disturbed.

To educate and control children's imaginary fears, we must find the fifth act for them when they do not find it for themselves. Many children's stories do this more or less successfully. "Little Red Riding Hood" is a classic example. The wolf should be painted with all the suitable horrors gradually introduced in the most seductive manner. That it all turns out well in the end, although crudely from the adult standpoint, is the necessary feature of this kind of spiritual homeopathy. Children are bound to hear stories involving fear, and if they are not told them by the proper artists of their lives, they will get them from less worthy sources, and perhaps from persons who have a morbid pleasure in merely making them afraid. Why should not teachers make stories which should fit the experiences of the actual children to whom they are told? The old myths are useful enough, but the modern child has new fears, the streets, the trolley cars, stairs to fall down, failure at promotion, robbers, and automobiles are full of terrors which might well be provided with suitable myths.

In a similar manner, every other emotion may acquire through literature its natural discharge. Let us not suppose that these emotions are issued by nature in job lots, and because we have a general name for anger, that every anger state is like every other. Probably no two cases of resentment are emotionally the same. A piece of literature or an idea that will touch the heart in one case may fail in another. The little girl above described needed just those four lions, or something else that would fit as exactly

into her fantasy. The power to read into the large dramas our own smaller ones comes later. At first we need more particular treatment. As Browning, with an application to his own poetry, says:

What matter to me if their star is a world? Mine has opened its soul to me! therefore I love it.

Teachers ought to be able to make stories that will fit particular emotional situations closely similar to those actually experienced by their pupils. If they are unable to do this with a fair degree of success, is it likely that they will be competent to select wisely from the store of accredited literature with which they may be familiar?

It may be said that teachers are not expected to select,—that this is done for them by their superiors. So much the worse for the children. The bread of life needs to be baked fresh if moldy crusts are not to take its place. So much the worse also for the teachers. Until teachers are able to control the work of their own profession, their life will be one of ineffectual martyrdom and discontent.

But there is, fortunately enough, immense unused capacity among our teachers. Even although we load them like donkeys and drive them like mules, the Pegasus will still appear. There are thousands of teachers capable of free creative work, who are balked and discouraged by the formalism of dictatorial methods and by courses of study arbitrarily imposed from above.

As a slight illustration of this, I may cite some work done by mere beginners in a city normal school. The problem was to write a story that would portray a situation in a child's life, painting the character so sympathetically that the hearer would identify himself with the hero of the story; and after this was done, and the arrested emotional stage clearly grasped, to lead the story up to a better and higher mode of thought and feeling. The following is a typical story, selected mainly on account of its brevity, and was designed for an eighth-grade class of boys. In a preliminary investigation it was discovered that about half of these boys had had, at one time or another, serious thoughts of running away from home, and that some of them had actually done so.

Yes, it was just a month since Willie had run away from home. He had felt very happy when he had first joined the circus, but now, as he thought more of it day by day, he was sorry he had acted so unwisely. This is how it happened.

Willie lived in a very cosy little house in a small village, with his parents, to whom he was very much attached. There he had dwelt happily for twelve whole years, and had had no cause for vexation, as every wish had been gratified. One day the circus came to the neighboring town, and a large party of boys, Willie's friends, had obtained permission to go to see it. As Willie desired to share this extraordinary pleasure, he soon acquainted his father with his wish. At first his parent saw no objection, but when he learned that the boys intended to go unaccompanied by an older person, he withdrew his consent, deciding that it would be far safer to keep Willie at home.

Now the circus had planned to stay a week, and the boys had planned to go on the fifth day. When this day arrived the boys gathered together, ready for the journey. Eager anticipation for the great joys and surprises awaiting them were depicted on every countenance. Willie sat at the window watching all the proceedings. He had felt bad when his father told him he could not go; but now, as he saw the boys setting out on the way, it seemed as if his heart would break.

He went to his own room, where he sat down and cried pitifully. Suddenly he roused himself, and, with a determined look on his face, began to search for something in the bureau drawer. After a while he drew out his hand, in which he held a small iron savings bank.

"Yes," he exclaimed aloud; "this is enough to take me to the circus, and I can there earn enough to see the show and pay my way back. I shall start early to-morrow morning, before any one is awake, and I will be far away from here when they first discover that I have gone."

With such thoughts as these Willie's mind was filled, until he finally closed his eyes in sleep. His sleep, however, was not in the least refreshing: strange, he was continually troubled by the thought that his parents would be very anxious and worried by his absence. But he put this thought aside, saying: "What do they care about me? If they thought very much of me, they would let me go to the circus, as the other boys' parents did. They ought to be glad to think that I am enjoying myself."

The following morning Willie rose bright and early, ready for his journey. He slipped quietly downstairs, took his hat from the hook, and was off. Reaching the railway station, he took the train to town.

He arrived just at the time when the circus manager was opening up for the day. Willie stood watching him for a while, hoping to get a glimpse of the interior of the tent. Seeing the little boy standing there and taking in all the proceedings, the manager called to him. Willie approached timidly. Had this great man, who owned so many wonderful animals and could do so many tricks, condescended to speak first to a strange boy? When near enough to him, the manager asked him several questions as to his name, where he came from, and what he intended to do. Willie answered him truthfully, and then waited for the great man to speak again. He did not open his lips for a moment, then suddenly he asked, "Willie, would you like to join the circus?"

Nothing could have been more unexpected than this question, and Willie was so surprised that he stood for a moment dumb-founded. Was this man actually going to let him see the circus for nothing, and also travel with it from place to place about the world? It really seemed impossible. Could he have heard rightly? perhaps not. This last question was not left long unanswered.

"Willie," repeated the manager, who had taken a noticeable interest in the boy; "would you like to join the circus?"

Willie did not now hesitate a moment to reply, "Certainly, sir." "Very well," continued the manager; "follow me."

Willie did so, and soon found himself amid the various great attractions of the circus he had so desired to see.

He passed up and down before the cages containing gigantic animals and curious birds, — elephants, giraffes, lions, tigers, ostriches, etc. With the few pennies he had left, he bought peanuts and amused himself by feeding the monkeys. Later he saw the clown making the dogs do tricks and jump through rings, and also the celebrated bareback rider.

His first day passed very quickly, and Willie was not required to do any work. But as the days passed on, he was asked to do more and more. At the end of three weeks he had a considerable amount of work to do, which kept him busy from early morning until late at night. He was obliged to clean out the cages of the animals, and bring them food and fresh water.

The worst part of all was that nobody took any notice of him, and he was knocked about as if he were a strange dog whom nobody cared for, and who was really in the way.

As a result, he had not much time for sleep, and when that time did come, he could not sleep. His thoughts constantly went back to his home and his parents. How they must have missed him, — how lonesome they must have been without him, — how they had longed to have him come home. But it had all been in vain, for Willie did not return. He saw his mother weeping silently as she busied herself with the housework, and his father, too, had a careworn expression on his face. How he would like to be at home! Once there he would never run away again.

But how could he return? The manager kept a pretty strict watch over him, and did not allow him out of his sight for one moment, for he knew that Willie would be of great assistance to him as he grew older. Besides this, the boy was a patient and faithful worker. And yet Willie felt that he must free himself. But how was he to do it? This question was the most difficult to answer.

Suddenly he felt a hand on his shoulder, and some one was shaking him gently. He opened his eyes, and beheld his mother looking down at him.

"Well, Willie," she exclaimed; "I had called you three times already, but as you did not answer, I came to wake you. Hurry up, or you will be late for school."

Could it be possible that he was really at home and in his own room, lying on his soft little bed? He put out his hand to reassure himself that he was truly awake. Yes, it was just so, and he had only been dreaming after all. How glad he was to be at home again with his dear parents. No, he would not mind staying at home on Friday, when the other boys went to the circus. His father knew best; and besides, after that terrible dream, he would never venture alone to the circus, for that might lead to the realization of the dream itself.

But it is not enough for a satisfactory social development that teachers learn to interpret children at first hand, and in doing so, learn to free their own personality for this purpose. The children must learn to interpret themselves to each other. They can do this only when they produce for each other. This is the law of spoken language, and it is equally valid for that which is written or printed. In fact, unless the teacher is in contact with children who are producing for each other, it will be very difficult and perhaps impossible for him either to catch the method or understand the matter which is best suited to their mental level. To ask children to write an imaginary letter for an imaginary situation, or even to write to mother or grandmother, is not so exhilarating nor so capable of being controlled by the writer himself as if he wrote to people on his own plane. He is then in a position to get the kind of criticism that comes from seeing how the others take his production, - whether it has been of service to them, interests them, arouses their admiration, or calls for their friendly help or correction. In no other way, moreover, can the teacher be sure that the truths she would fain inculcate have actually entered into the life processes of the pupils.

Children are, of course, very ready to do this. They often do it by surreptitious note writing, without the teacher's approval. But they are still more willing to write for each other with the help of the teacher, and with worthier aims. Examples of this practice can be found under our best teachers and in a few of our schools. The Ethical Culture School of New York organizes some of its reading exercises on what the children write. Both the Francis Parker School in Chicago, under Miss Cook's leadership, and the University Elementary School carry still further the development of the children's own activity. Under Miss Martha Fleming the original dramatic work of the children reaches a very high degree of excellence. Often one section of the class, or one whole class, forms a group to write something for the other section or class to read. This is more effective morally, and in the other results gained, than when each child writes by himself. The two following examples of this kind of work, the first from Miss Port's class (second grade), the second from Miss Wygant's (first grade), both of the University Elementary School, will serve as examples. The first lesson runs on æsthetic lines; the second is more scientific and practical, and represents actual work the children had done. In both cases they were telling about their own experiences to a real audience.

(1)

On Thursday, November 3, we went to Beverly Hills. At ten minutes of 9 we crossed the Midway, and went on the street cars to Englewood. We had to wait until a quarter of ten for the train. We were on the train about fifteen minutes.

On the train Denison saw men making a new park.

Geraldine saw seven cows.

Elizabeth saw some pigeons walking around a pigeon house.

Dent saw a flock of birds flying south.

Lanning saw a wagon of corn.

Denison saw some corn that had not been cut down.

Beatrice Lovett saw cornfields where the corn was stacked like tents.

Meredith and Miss Port saw a field of cabbages.

Lanning saw a man plowing.

Paul saw many pumpkins in a store.

Mary saw some ducks.

When we got off the train the air was clear and fresh and breezy. It seemed like the country. We walked and ran and screamed. We saw a pond of water and a burro. We wanted to find snakes and frogs in a pond. But we had to go on.

Miss Port said it was too far to go to the farm. We were disap-

pointed, but we had just as good a time in the woods.

The woods were beautiful and quiet, and there was not a house near by. There were oak trees and the leaves were brown and yellow. We found some red leaves. The oak leaves rustled in the trees. Many came floating and whirling down. Some fluttered down. The ground was covered with dry, brown leaves.

We had a leaf fight. Then we covered Mrs. Thomsen with leaves. We said, "Where is Mrs. Thomsen?" and up she jumped. Then we covered Miss Port. Some children climbed trees and shook the leaves down.

After a while we took a walk. We found another pond. We think it was an old milldam. We ran down the old logs. We played a long time. Then we wanted a drink. Six of us went to a farm for water. Before we got any water, the woman told us to be careful in the pasture. We said, "Why?" She said there was a wild bull in the pasture. We ran for the woods again.

We ate our lunch in the woods. We wanted water all the time. Next time we are going to take bottles of water with us. While we were eating our lunch some bees came to see us. One bee stung

Gordon on the finger.

After lunch we played games and told stories. We saw a man with a gun. We told him about the wild bull, and he said he would have to shoot him. But we think he was just fooling.

At 2 o'clock we started for home. We had a good time.

(2)

We went hunting.

We did not take a gun.

We took acid.

Guess what we were hunting for.

We found it in marble and in limestone.

We found it in bones, shells, and chalk.

We found it in lake water.

We found it in the soil in our school yard.

"Lime seems to be in a great many places," said Charles.

Work of this kind is being done by Miss Nelson of the Pierce School, Brookline, and by Miss Shaw of the Wells School, Boston, although in these schools the work tends to the production of plays which are acted by the pupils. The following was written by an eleven-year-old pupil of Miss Shaw. It was her own doll that the little girl had in mind. She put in the grandmother, not because she had one, but, as she said, because she wished she had. Spelling and punctuation and arrangement are those of the author of the play.

PATSY AND LAURA

Scene (1) Conversation between Patsy and Laura.

(Patsy) I wonder where Laura is. I hope she will come.

(Laura) Here I am Patsy ready to play with you. I brought

Celia with me.

(Patsy)

Oh there she is with that horrid old doll again. I know your mother bought that doll in the Five and Ten cent store. My pretty Anna came from Paris.

(Laura) My Celia looks just as pretty as your Anna.

(Patsy) Now don't you say that any more Laura. You know very well that Anna is far prettier than Celia. Can't you see her beautiful head and curling hair and such pretty eyes and the lovely clothes my grandma makes

for her.

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(Laura) You know, Patsy, that my mama is very feeble, she

cannot even sew as well as your grandma.

(Patsy) Come here Laura I'll tell you something. We'll

run off to my grandma and ask her to make Celia

some clothes.

(Laura) Oh that's delightful Let us go right away.

Scene (2) Grandmother in sitting room.

(Patsy) Grandma?

(Grandmother) What my little dears what?

(Patsy) I want to ask you if you will make some clothes for

Laura's doll.

(Grandmother) Of course I will I'll begin right off. Hand me your doll Laura. Why Laura is that your doll. Well, well, well, I should think you need another

one. Here's one my dear.

(Laura) Oh thank you ever so much.

(Grandmother) Now there will be no quarreling both the dolls are the same. Run off and play together. Now both of them are jolly. Oh! how short the time is. I hear the bell calling me to dinner. I must leave my work and go.

This little play is well worth close analysis. One thing, at least, stands out, namely, that the larger controlling features are better managed than the lesser consistencies.

These few cases are perhaps sufficient to show the direction in which the teaching of reading must necessarily advance. The main clew likely to lead to future progress is a further study of spoken language. In following this, it is easily seen that the most important condition of both spoken and written language is their service in social relationships. Both are merely means of communication, and thus must constantly and steadily be used as such by the children themselves, if either satisfactory technique or understanding is to be looked for. The business of the teacher is not

so much to drill and lesson the children as to help them to organize themselves socially, to stimulate a flow of honor feelings from one to another, and to give each a chance to make and unmake the habit and opinion of his fellows.

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CHAPTER X

MANUAL ARTS: INDUSTRIAL AND CONSTRUCTIVE WORK

It may safely be said that manual arts are more fundamental to the development of humanity than even the power to read and write. They have, nevertheless, been tardily recognized on the programmes of modern schools. Many a so-called "safe" educator is still gazing mildly at them, when he is not actually hostile. The reason of this belated recognition is not far to seek. The school began as an accessory to real life, and was limited at first to the accessory classes of the community. The aristocratic feudal education despised work. Education, to quote Spencer's phrase, was largely ornamental, and the main virtue to be inculcated under the ornament was obedience of either a military or a monastic order. Later on, when people's schools were started, as in New England, elementary manual arts were already taught at home. To-day the high specialization of modern labor makes it impossible to teach these fundamental life activities and the morals that guide them, except in schools. Even the apprentice system has disappeared.

The apperceptive masses of commonplace educators, as this condition is forced upon them, assimilate these new studies to the old ones, with which the pedagogic mind is more familiar. Manual training is organized as a subject,

as much like previous subjects as possible. Paradigms in joints are substituted for those in Latin. Even the declensions have their analogues in painfully graded exercises in wood or metal. But military obedience is thereby saved, examinations are still possible, courses of study can be made, the ordinary "culture" and the ordinary discipline, although manifestly in reduced circumstances, continue to pay their calls. This blindness and this narrowness is sometimes called a compromise.

Many pupils seize the essentials in spite of the form, but others are disheartened. Mr. H. D. Lloyd's notion, that because boys from different homes work together at the same bench they will therefore honor labor and love their comrades, is not so true as we could wish. Whether they will or not, depends on why they are working, and whether they have realized that comradeship is help, either given or received. Why are they working? Is it to produce ideas? The joy of the artist in his work is the spring of all satisfactory labor. The essence of this is the idea which he is producing. But however useful in its place, the analogy of the highly developed artist, such as the painter, is frequently a stumbling-block. In his case the ideas to be realized are largely within his personal control. Ideas in the ordinary manual arts, on the contrary, are realized by coöperation and the division of labor. The magnitude of the work demands it. What becomes, then, of the artistic and creative intelligence of the individual laborer? Is he not forced to work at a part in obedience to the orders of others?

This is certainly what results when the laborer is not educated. But is it not precisely to overcome this economic

and ethical defect that our schools for manual training are established? Why, then, should they repeat the artistic and social faults of uneducated labor? Why should pupils be asked to do work which does not spring from their own minds as a result of their productive and creative imagination?

The reason for this is near at hand. It is not seen that productive and creative work, when it is large enough to require many hands, requires also a social organization to carry it out. This social organization is a tool more important than planes or chisels. Pupils should be trained in its creation and its use as much as and even more than they are trained in the use of any material tool. To make or help to make a serviceable social organization, in order to produce results in iron, wood, or clay, is itself a work of art. But unfortunately, instead of training pupils in social organization, most teachers borrow second-hand the crude organization of the past labor world, descended as it is from military and feudal times, and still maintained and multiplied by modern oppression. They accept it as a necessity, use it blindly, and, without intending to do so, pass on to their pupils its unchristian practice and its worn-out philosophy.

The present labor world is becoming wiser. It is beginning to understand, in a certain dim way, that conscious social organization is imperative. Workmen are uniting all over the world. The immediate purpose is to protect their jobs and increase their wages. The more remote purpose is somewhat vague. Many look to a reconstruction of society along socialistic lines. This is the old *a priori* disease, and consists in picturing an accomplished state of

affairs, although remote and inaccessible, in order to get the easy opportunity of making deductions. To obtain control of the tools of production is admittedly the logical aim of those who work. But what are the tools of production, and who are those who work? Social organization is the principal tool, and all who work on this are genuine workmen. It is not practical to assume an ideal, and therefore an a priori societary tool. Numerous experiments in all walks of life are necessary in producing such tools, in order that growth and selection may give increasing control. Suddenly inject the socialistic state—and who could run it? Coöperation in smaller groups is more feasible, followed by natural federation into large protective unions.

This coöperation, however, must be a coöperation of ideas and of life. Production is for the sake of consumption. Man as a producer is not exploited any more viciously than man as a consumer. In the latter rôle he is robbed and fooled at every turn, and rarely gets what he wants. Inartistic consumption is just as bad as inartistic work. Art for art's sake, or work for work's sake, are both quite misleading. The artist and the worker have joy in their work only when they feel that they are producing with and for those with whom they are united in social bonds, and to whom they look for love, admiration, honor. The social organization that workers need is one that definitely includes consumers.

How this is to be worked out on the large scale of an adult society is not our immediate concern. Helpful beginnings, however, are made in various places. Municipalization or communization of various economic functions, although far from fully social, have already shown their

right to live. But education must not wait till things are already accomplished. That education is comparatively ineffectual which merely imitates the existing state of society, and aims to bring up the young for nothing better than to fit in, more or less exactly, to given conditions. Present conditions are always dying out, and if we begin, ten years before his graduation, to fit a boy for his particular niche, the particular niche may meanwhile disappear. To what an enormous extent has the whole industrial business and professional world changed in the last few years! To be practically efficient, education must lead as well as follow. It can never divest itself of the function of assisting in the creation of society.

The school is, above all, an embryonic community which, although simpler and more generalized, forms the key to the adult community of citizens into which it is to grow. Municipalization and other social aims must be partly worked out in the schools before they can reach any great ethical depth in the community as a whole. To prevent the full realization of the coöperative spirit of the social embryo is to malform and degenerate that which should result from it. Mere intellectual knowledge of civics, customs of voting, etc., will never nourish the soul of youth, unless this knowledge is experimented with and proved to be a power in gaining results actually wished for by the pupils themselves. For this kind of experimenting there is no better opportunity than is afforded in manual training and industrial work. Here results are concrete and objective, even to the dullest mind. This we see clearly from the individual standpoint and in application to the mere material worked with. To the social point of view we are strangely blind.

Children themselves are not so blind in this respect as most of their teachers are for them. When they want to do a thing of any complexity or magnitude, they naturally look for help among their comrades and such adults as they can interest. They size up the fitness of these different individuals with considerable accuracy, and select them to perform different functions in the group which is thus created. If they do not succeed perfectly at first, they learn rapidly by experience. They instinctively rely on the specialists among them, who have shown their capacity in different directions.

A superficial observer of children's activities is accustomed to think that children work and play just to be together, and have no particular interest in what they produce. This is partly true of a certain class of activities, but there are others where the thing produced is the key to the situation. Whoever has seen children building a house, for example, ought to have observed that coöperation and division of labor, social organization, selection, and leadership were used as means and tools, largely for the sake of the product which all were to enjoy. That such work is not conducted wholly for the product and its future use, but partly for the enjoyment of the process also, is, however, a factor which is most important, and one which would solve many of our labor difficulties if the adult world could be brought to understand and use it.

The process at work is not simply the exhilaration of physical exercise. It is much more the social touch and comradeship of group activity. It depends upon selection for its effectiveness. A mere heterogeneous crowd will not undertake such work unless compelled. Those who have

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sufficient mutual liking, confidence, or admiration to enable them to overlook slight disagreements are the only units out of which free social organization can arise. This carries with it the necessity to exclude for the time being (and with all friendliness) others who do not fit in with the genius of the enterprise. The effectiveness of the group is tested, in the first place, by its power to hold itself together. It is, as a consequence of this, that it can produce satisfactory results.

When children spontaneously organize in this way, why do our manual training schools and manual arts courses fail to recognize and enlarge these truly human and productive powers? To utilize them successfully would help on a twentieth-century renaissance which would far outshine the renaissance of the Middle Ages. To put the whole workman into the work always leads to the most productive ends. To increase the practical understanding of such coöperative work is one of the best services of social education to the adult community as well as to the young, and as it permeates the whole of society, it will slowly mitigate the present crude and tyrannical practice, where too much work is done without joy, without honor, and without responsibility.

Let us look at the question for a moment from the physiological side. To train the hand as an organ of the individual brain, to show that the motor regions of the cortex are necessary to vital thinking, is a solid advance for the theory of manual arts, but these considerations are concerned at present primarily with individual mechanism, and omit important aspects of this. The special social regions of the brain, the language centers, the directive centers of

the frontal lobes (if Flechsig's localizations be admitted), are equally important for the individual regarded as a unit, while for the individual regarded as a member of society they are absolutely necessary. It is the brain as a whole that must be trained, and this cannot well be done if the various functions are severally stimulated, first one and then another, but without definitely recognizing their power to associate, —a power that can never be gained without a normal and natural social environment.

Why should this largest and controlling work in brain building be left to chance, to unreasoned pedagogic habit, or to a comfortable hope in the future? To expect pupils to combine powers in later life which have been separately polished in school is like handing them the parts of a delicate machine whose function is unknown, and wondering why they do not put these parts together. The result is that thousands sell single parts to others, who build misshapen machines to suit themselves. To teach the pupil to be the bench assembler of his own brain capacities will not prevent, but will necessitate, his dovetailing in his own mechanism to that of others; and to allow him to dovetail socially is the only way of teaching him to assemble individually. Resourcefulness, initiative, and gumption are social powers, and can never be cultivated alone. Without them mere manual skill is largely wasted.

In earlier chapters we have already described several cases of self-organized group work as applied to manual training in the schools. In fact, children select work of this kind in much larger proportion than adult-made curricula are usually willing to recognize. If the courses of study were made more largely by children themselves, we

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should find a great increase of industrial and constructive work immediately appearing in the schools. For this there is both an instinctive and an intellectual reason on their part. Children are more motor-minded than adults, in the sense that they have a more pressing need for the immediate motor realization of their ideas.

But there is, perhaps, a deeper reason. Children are surrounded by a world which they do not understand, and they differ from some adults in that they usually realize this and make attempts to penetrate it. They see around them all kinds of industrial activity, railroading, bridge building, house building, road making, dressmaking, cooking, etc. These haunt their imagination. Children cannot look upon them passively until they understand them to the depth that their mental capacity will allow. How is it that a wagon runs, or that a fire is made? There is no answer to such questions until it comes through the experience of controlling action. The child must experiment to know. In this work the main difficulty that the child strives to overcome is one of synthesis. The various details are seen, but they are intellectually scattered until they are united by actual construction. At the beginning the child's point of view is not to make things exactly like the objects that he sees, and serviceable from our adult standpoint. His production is serviceable to him, if it unites for him in his own mind and in the minds of those on his own level the features in the adult production which he has been able to observe.

In accordance with this need to synthesize, manual training and the industrial arts begin in the young child's mind as a kind of dramatizing. The nature of this may be

illustrated by a case which is principally dramatizing, and gives but indications of material construction. A little girl who had just begun to go to school carried a number of buttons in her pocket. There were a number of little smooth white ones and one big black bristly one. These she occasionally took out and arranged to represent the scholars and the teacher in her school, supplying the conversation and the proper climaxes as she went along. This varied from time to time. There was no single drama. What use were the buttons? Simply to keep her mind from wandering. When she got through with the cross words of the bristly one and the chain of images connected therewith, she was confronted by the chance of a fatal gap and the possibility of losing the whole thread of her per-But when the little buttons stood patiently ready she could wait with safety for them to remind her of the next step.

Grown people use similar devices. Train dispatchers frequently provide themselves with models of cars and engines, which they arrange over the floor of a room just as the trains are to be found at any given moment throughout the division. Von Moltke is said to have had, during the war of 1870–1871, a room representing France and Germany, and covered with toy battalions placed exactly as described by the latest dispatches from the field. The handful of buttons is really a simple piece of material construction, and shows the germ of all more elaborate manufacture.

Indeed, all our complicated industries are but means of enhancing life, and are useful only as they help us to synthesize our thought or feeling. With a pen, a table, a book,

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a chair, proper clothes, and a roof over one's head, feelings and thoughts are less discontinuous, and one's image of life becomes more satisfactory and complete. It is in order to get these results that we take the trouble to reconstruct the material world, and build bridges, railroads, steamboats, houses, looms, and printing presses. Our thoughts and feelings are pragmatically measured by what they accomplish in yielding us all larger, more consistent, more social, more attractive and lovely thoughts and feelings. Von Moltke was not only dramatizing his toy battalions, he was reconstructing Europe. In the same way the child was attempting to reconstruct her world with her buttons and her drama, and was doubtless succeeding in doing it.

To recover constructive work for the soul is the only way to make it educative or even practical; and it is the only way to make it serve the progress of the labor world. No one cares to construct just for the sake of constructing, although it is the curse of uneducated labor to be forced in large measure to do so. Material construction must be felt to be a part of the construction of life in order to give it human value.

As a step to this human value, dramatizing is a great, if not a necessary, feature. Dramatizing is, after all, only a kind of concrete and creative planning, which prepares the way for real action. It moreover always emphasizes the social aspects of the plan, and often gives an opportunity for other individuals actually to take part. It is natural for children to begin their constructive efforts, as applied to material, within the circle of their social relationships, and to produce either for an actual, or, more frequently, for a dramatized social need.

In working out these schemes children are not usually in a position to have adults make models to help them definitely in the construction which they most wish to understand. They must, therefore, make their own. There is, however, a further reason. Children have an immediate desire to construct for themselves. Simple dramatizing, with the weight on personal relationships, begins to develop into an interest in the structure itself. A small child will accept a toy wagon ready-made, and dramatize social relations with it. Later on, he wants to know how it is made, and will prefer to make one for himself. This interest in structure is definitely related to the dramatizing instinct, and is indeed an offshoot of it. In thinking out the structure, the child thinks of its parts as he thinks of the persons in a play. The spoke will do this, the axle that, will play this or that part, as our idiom unconsciously expresses it. His need now is to synthesize all these parts and make of them a working whole. Just what are the features that make them work together? Is it the exact length? Is it the red paint, or what? To gain a conception of what a wagon is essentially, he sees that his actors in the drama do not need to be exactly and painfully imitated. Nor, on the other hand, do superficial imitations satisfy him. Cardboard wagons, for example, leave out just the essential thing he wants to get, and do not give him the slightest help in real construction, although they may be useful in other kinds of dramatizing. Mere analysis is not sufficient. He may take the wagon to pieces and have no good idea of how to put it together, or even if he succeeds in doing this, he has not learned the essential characteristics of the various parts, and the limits within which they may vary and still accomplish the purpose.

The thing he wants to do, and needs to do at this stage, is to make a translation of the original wagon which he desires to understand. This requires some resourcefulness, some invention, some imagination. He must choose such material as he thinks will do, and he will naturally lighten his task by omitting the features which are not, in his expectation, quite essential. His mental process is a kind of reasoning, partly inductive and partly deductive. He builds a working hypothesis as to how the wagon works, and proceeds to verify it by making the wagon.

While dramatizing that involves only persons thus runs into and gives rise to construction of material, it rarely, if ever, does so without retaining a real connection with its offspring,—a sort of umbilical cord which feeds the new tendency. The wagon is made not merely for the wagon's sake or in order to understand the method of manufacture, but for a wider purpose of some kind. The child thinks how fine it will be to use it in this way or that. He invents all sorts of situations where the wagon will be the hero of the play. In doing this he constantly has other persons in mind, and this larger drama feeds his ambitions and gives deeper social motive to his work. Many manual training courses cut the umbilical cord and destroy the social motive, though it is encouraging to note that this is becoming less and less the rule.

In cases where the natural social motive has been removed, the prescribed course of study and the readymade teacher attempt to substitute some other motive. They say practically to the child, "You must do this work

because it will be useful to you in your adult life." Unless the child is capable of reflecting on his coming duties as a father of a family and a citizen of the community, he does not get the full force of this counsel. In fact, he gets so little of it that no teacher would ever think of such a motive as self-sustaining. It is, after all, the here and now that gives fundamental and self-sustaining motives to the child. The hope of immortality in the Valhalla of the grown-ups is not sufficient for his needs. No child really desiring to make a wagon has any motive referring to adult life except as a remote accessory to others. The teacher therefore backs this up by the hope of promotion to the next grade, and, as a step to this, perhaps a mark, or, at least, approval for the day.

This is what the so-called practical teacher does, and having done so, he is supposed to get the child "interested" in his work. Tremendous intellectual contortions are performed to show how this may be done, and the outcome is far from satisfactory. A much pleasanter and more effective rôle awaits the teacher who can see that what is needed is to turn the thing around, and half the time, at least, to allow the child to interest him.

Even where teachers realize that it is good for children to have some use for the things they make, they frequently invent this use for them. Something altruistic, from the teacher's standpoint, is frequently chosen. "Let us all make ironing boards for our mothers, and you can take them home, and your mothers will be so proud of them." Bookcases, paper knives, pencil holders, etc., go to supply an imaginary demand. The child often knows beforehand that there is no real wish for these things. But the high,

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ethical motive of self-sacrifice does not need to inquire. "Don't tell till you have it all done; it will be such a surprise."

Admit coöperation and the production of individual ideas, and we have quite a different state of affairs. The child no longer wastes his work. He takes the consumers into account, and he is likely to be one of the consumers himself. But he is not selfish. He shares his work product, and he looks forward to doing so, although the sharing is largely with those on his own level. Two boys may make a wagon together, or a sled, and reap the advantages of division of labor and rapid execution. In these cases they look forward to a common use, and it is this which guides the production. They produce together because they have confidence enough in each other to think of sharing. But while two boys in a room of fifty may coöperate in this way, it will never happen that two more, and two more, will do so until the fifty are exhausted. Confidence is not so mathematical as that, nor do all happen to want sleds or wagons at the same time.

If individual interest is to be maintained and a natural ethical spirit developed, production must be organized in relation to consumption. There will be all kinds of purposes relating to production and consumption in the minds of fifty children. It is simply a matter of foresight on their part to see what can actually be accomplished. It is at this point that full discussion and estimation of consequences is most valuable. Here the teacher can help through his greater experience. Such discussion is, in reality, a kind of preliminary acting-out, and during its course some of the things first desired are seen to be unsatisfactory,

intrinsically or because of the circumstances. The foresight gained by mutual discussion limits the things desired, and leaves over a number of more practicable plans. The discussion also leads to better coöperation. New confidences in one another are awakened by the attitude taken and the knowledge revealed during the planning stage. The case already described (p. 131) where a third and fourth grade united to build a house and to decorate and furnish it shows all these stages in full activity.

It may be pointed out, however, that such a wide degree of confidence and organizing capacity cannot always happen, nor is it to be expected. Indeed, where the class divides into a number of groups there is frequently a more intense coöperation and a more easily managed kind of organization. A large variety in the products to be consumed, with the consequent variety in the organizations which produce them, is not lost upon the children. They compare the different products, and borrow good features of group organization from each other. It is difficult to say whether they get most out of the large scheme of organization which definitely involves the whole class, or out of the multiplication of smaller groups. Both are useful where they are real, and have been invented to further real desires of the children themselves.

Constructive work, manual training, and industrial work, as these are understood in the schools, naturally raise the question of vocational or continuation schools. These already exist for the more favored classes as technical and professional schools, and it is one of the most glaring injustices of our educational system that they are not also provided for those classes of the community which have naturally

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the most difficulty in making their way in life. The lack of such schools, even on the basis of our present coercive industrial organization, results in enormous waste in production.

As a recent report of the Massachusetts Industrial Commission shows, the work of boys and girls from fourteen to sixteen years of age is worth so little, and is so poorly paid, that those who work during this period actually earn less before they are twenty, and much less before they are thirty, despite their two extra years of labor, than do those who are better prepared. Although selection of those who are most fit by nature may contribute to this result, it does not seem unreasonable to assume that skill and habits gained by proper preparation play the greater part. Trade schools that succeed most emphatically in raising the wages of their graduates, as in the case of the Manhattan Trade School of New York, sometimes actually select the least promising of those who leave the public schools at fourteen. But the reality and concreteness of the tasks appeal to the children. They are able to see into them as they were not able to see into their previous school work; and although their experimenting is within narrow lines and too strictly confined to material things, they are able to see the results and to measure them by actual conditions in the labor world.

Trade schools, however, are only patches joining the ragged garments of our educational and industrial systems. They simply educate the child so that he can be used as a cog in some industrial wheel — a thing they can do well because they are close to the wheel. They send out individual parts well enough fitted to prevent them from being thrown into the scrap heap. For this they deserve high honor.

But the common schools, when they are true to their ideals, have a deeper and more comprehensive task. Their place is to train human beings for citizenship. Although we cannot have good citizens without vocations, neither can we have them without a culture which brings them into contact with the broader interests of humanity. The power to organize and to appreciate existing conditions for the worthiest aims, whether for work or play, is the chiefest virtue of a citizen. Merely reading or hearing about such organization will never produce satisfactory results. Habits, insight, and judgment gained from actual experience are the only practicable and progressive educational instruments. Pupils must be trained to create society, not to float in it.

The constructive and manual training courses in our high and common schools should afford the most admirable opening for this kind of work. All studies are, of course, to be measured by their value in social service, but direct work with material yields a service which is both simpler and more fundamental than any other kind. The aims and purposes of the worker doubtless come first; but the complexities of these cannot be developed much beyond the power to execute, without becoming fantastic and sterile. Science, literature, art, and philosophy may enlarge our aims, but if, either directly or through the organization of others, they fail to show results in actual, material betterment, their spiritual significance is lost for this world, whatever may be true of the next. Manual training and industrial work become true cultural subjects on one condition, namely, that they be used to give the pupils the power to construct, not models in wood or clay, but their

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own lives and the lives of those with whom they are united in self-made social bonds.

With such a training widespread in our schools, we may expect to have steadily growing in the community an ethics founded on work. This, too, will be guided by a conscience which works and which can work, because it will be more largely dependent on actual self-organized contact with fellow-men. Society will become an extension of the school, and the work of social education will be kept up in later life. If purpose groups formed in school are selfsustaining, they will be still more so in maturity. Even now the kinds of association which have been left to selforganization in school and college, although they are of the least spiritual and material significance, show a considerable tendency to go on. Dining clubs, fraternities, and other friendly organizations of fellows project themselves far beyond the school or college, and many are of the opinion that the effects of such associations are the most valuable results of a school or college course. Even when these organizations are considered, as they are in some educational circles, dangerously inimical to the work of the school, it is only further proof of the unwisdom of allowing so powerful a force to escape enlistment in the more purely cultural field. When self-organized group work is recognized as the controlling condition of satisfactory work in school, it will be seen to apply even more effectively to adult industry and culture.

Some such extension of social education is the only hope for democracy. On any other lines society breaks up into warring camps. The result of this is waste, when it is not positive degeneration affecting both industry and education.

As Franz Krauss says, in his study on folk death: "A people which is divided into two such camps can never avoid destruction, since extreme wealth and poverty are conditions which oppose the maintenance and development of the folk body. In the one camp there is failure of intelligence, because the individual organization is weakened in consequence of frivolous and unwholesome lives lasting through a file of generations, — a fact shown by the deficiency in organic strength and natural talent. In the other camp also there is failure of intelligence because, although there may be actual constitutional vigor, the means and opportunity are lacking for proper development. The sentiment of right is numbed and the feeling of solidarity is lacking on both sides, and completes the picture of deep decadence. The results of injustice, coercion, exploitation, antagonistic friction, produced within such a folk body, or precipitated by outside oppression, are written in terms of character degeneration and its accompaniments. Decadence is plainly bound up with malformation of social relationships, and this itself is again fed from the injustice which finds its supporters and purveyors within the folk body. In this process education and opportunity play an important part in that they bring to the surface these secret changes in character, which indeed are not plainly seen at once, but which, in the succession of generations, evolve drilled and sharpened, changed and degenerated social types."

If America is to avoid such a condition of affairs, the schools, long idly complimented as the bulwark of our liberties, must be actually organized to produce the intelligent coöperation necessary for their preservation. In early times

the American common school contained pupils from all classes of the community, and the contact of the children of both rich and poor produced a fellow feeling not entirely outgrown in later life. To-day private schools for the rich are steadily increasing in number. It is idle to inveigh against this tendency as an evil without looking into the causes for the change. The prime condition is that the rich do not feel that the common school offers the advantages and opportunities which they wish their children to have. They do not measure this in mere scholarship, but in life values so far as they understand them. They object not so much to the curricula of the public schools as to the kind of social contact to which their children are exposed. If any one will think himself into the place of these parents, he will find much to justify their course.

There is, however, one life value germane to the common schools, although rarely practiced therein, which would appeal powerfully to the rich, namely, a training in leadership, in social effectiveness, and in honor. The rich who are not degenerates desire to lead in society. They desire, honorably enough, to convert a part of their wealth into social power and prestige, and even if this be impossible for them personally, they desire such opportunities for their children. It is not wholly with their approval that they see their offspring grow up to spend their lives in frivolity, or to expatriate themselves for mere pleasure.

If the common schools offered actual experience in leadership, and an actual acquaintance with the problems of social organization, there are few parents, however rich, who would not see the value of such a training. Other things being equal, the son of rich parents would have an advantage as a leader, although he would need to learn, by actual self-organized contact with others, the limits of this advantage. He is much more likely to find this out in school, where practically all are removed from the severity of economic strain, and where aims and purposes are naturally idealistic, than ever again in later life. is also more likely to find an opportunity for his leadership in a common school than in one for the rich alone. The life of the playground is absolutely inadequate for such a culture. The youngest children in the schools know the difference between self-organized, productive work and mere play, and where there is no coöperative organization in higher concerns play itself tends to revert to brutal and uncultivated forms. The contact of the children of the favored classes with their less wealthy fellows, in such a way that the advantages of home refinement and material resources obtain the weight that they can naturally command in the presence of ideal interests and in face of the criticisms of an organized group, is not the kind of contact to which the undegenerate rich object. It is needless to point out that such a truly common school must be presided over by teachers who know both rich and poor, and who are capable of being honored by both.

In such a school constructive work, manual training, and industrial work would form the foundation of a large part of the activities of the children. To be properly carried out, this requires the best and most expensive equipment. Private resources ought to unite with general public taxes in paying the bills. For much of the self-organized work the pupils themselves ought to be the avenue through which the private support should flow. Our present practice of

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putting the same book or the same saw into the hands of every pupil, because, forsooth, the schools are to give equal opportunity for all, barely preserves the letter, and omits a great part of the spirit of real coöperation. Pupils should have the opportunity of giving themselves, or of interesting their parents to give, for specific purposes which they wish to carry out in combination with their fellows. On the other hand, means and equipment should not be lavished on those who do not know how to use them, and have no moral purpose in mind. Things that are made should be used in the school, or possibly sold under such regulations as would prevent competition with established industries. It might even be possible for such a school to pay for a certain part of its running expenses.

Such an attitude on the part of those who support the school would be most socializing and humanizing both for rich and poor. The children of the wealthy would be trained to give, not for charity, but for the carrying out of schemes in which they are interested, and in which they have succeeded in interesting others. The children of the poor would not only learn to respect, but to appreciate and know, the stored human value of wealth, nor would they ever be overloaded with things which they would neither understand nor appreciate, since nothing would develop further than their desires and organized plans could carry With such conditions in the social embryo, the adult society which grows from it is not likely to show the extremes of material wealth and poverty which it unfortunately reveals to-day. Self-organization would take the place of coercion, and property might be seen to be what it essentially is, — a social product and a social good.

CHAPTER XI

FINE ART

Drawing and, in a growing number of cases, painting and modeling are now fully recognized on the ordinary school programme. What can best be done with them is still, however, a subject of debate. Too often they have been regarded as standing alone and affording a kind of relaxation to the more strenuous work of the school; and too often they have been handed over to outside teachers, or even to those who were not teachers at all. At one period in our history, courses in drawing and "drawing books" were practically dictated by Kensington. Amiable artists, inspired doubtless by ambition for art rather than for the development of pupils, consented to arrange in so-called logical form a series of exercises from straight lines up to historical designs or complicated perspectives, for the small consideration of the royalty on the books.

The effect on the children was quite disastrous. An experience told by a lady of natural artistic taste, but now entirely unable to draw, will illustrate what Herod was doing among the innocents some twenty years ago. When a little girl this lady was provided, along with the rest of the class, with the usual drawing book: first page, vertical lines; second page, horizontal; third, oblique; fourth, simple combinations, leading up through upright oblongs to a gravestone, with little marks for grass around the base.

"How I worked and slaved for weeks with pencil and rubber," said she, "to get on to that gravestone, the one alluring object within my scope."

Since those days drawing at least has been "correlated." 1 This was the introduction, and the acquaintanceship has been ripening ever since, until now there are few good schools that do not use drawing in more or less intimate connection with many other subjects. It soon began to be seen that one could draw in color, or even use color without much drawing. It became plain that mere line was an abstract, and that if crayon or brush were available, the child's imagination, which deals earliest with masses and wholes of things, was capable of expressing itself with intelligence, rapidity, and force. But drawing in clay is also possible, and plastic work in this medium, simpler and more fundamental than either line drawing or color, was soon added. Kilns were established to burn and glaze the toy dishes, pottery, and figurines, which the children delighted to make. The subject as a whole has been striking its roots not only into other subjects, but back through the minor arts and crafts into life itself.

A great part of this change was stimulated by the interest in child study. The work of Earl Barnes, Herman Lukens, and others on the spontaneous drawings of children revealed the imaginative and constructive features of such drawings, and showed that they were in reality ideographs rather than attempts at objective characterization. It was found that the young child drew much more what he

¹ The work of Dr. J. P. Haney in New York, where art and manual training have been put under one head, is one of the best examples in America of broad and liberal correlation.

thought than what he saw. He would thus represent in one picture the four sides of a house, or, like the early Greeks, show a full eye in a profile. It was also observed that he liked to portray a succession of events on the same page, and, quite contrary to Lessing's ancient canon as expounded in the "Laocoön," was accustomed to represent the time element and turn his drawings into a kind of drama.

Another reason for the change was, doubtless, the development of art itself. In this, both impressionism and the increased interest in the minor arts have played a part. Impressionism led the teacher who understood it to look for the large and environmental aspects of what was seen, and to tolerate an emphasis which left out much. Such treatment is indeed quite characteristic of children's use of clay, crayon, and color. Although lacking the profoundness, they begin in the spirit of Rodin and Monet, and naturally omit, because they do not see, what these men artificially repress. The growing prominence of the minor arts, with such leaders as Anning Bell, M. Bailie Scott, Professor Kolaman Moser, and Peter Behrens in their service, have shown the world that a chair, a chain, or an enameled comb may appeal to the imagination with as pure a note as any form of art.

The tendency of these changes, depending on a more adequate conception of the subject on the one hand and the nature of the children on the other, can be summed up as increasing consciousness of the value of expression. As in other subjects, however, the semi-military or patriarchal organization of the school has led teachers to regard art expression as a matter of the individual rather than of the group or society of which he is a part. Mere expression is

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thus often sought for without its natural conditions. As a result, such expression becomes vague and empty, loses motive, and would die out entirely but for the stimulus of artificial competition and the teacher's demands. One side only of the rights of expression has been duly recognized. The other side, however, is equally important; for what external reason, or to whom is the expression directed, is an even more controlling element than the ideas and emotions that are supposed to surge within the individual himself.

The evils of this lack of insight are not so apparent in the lower grades. The reason is that the social reference is really present, although partly concealed. As already indicated, children make dramas of their drawings. Their figures are practically dolls, and are personified for the purpose of action. These constructions help them to imagine society, and this is the purpose for which they are made. Such play naturally runs into constructive work in paper and cardboard, which at this stage may properly enough be quite superficial. Even in this work, however, children are too much isolated, and therefore require to take the same "course" and repeat the same model. They would naturally undertake, if their motives were recognized, to combine with each other and divide their labor, in order to enjoy a larger and more complicated production. When this is done a transition is made from the imagined society of the single player to a real society of his fellows, and this reacts both on his idea and on his expression of it. He must fit in his idea and its expression to the conceptions of others.

An example of this is seen in the following case. A number of children, from eight to ten years old, were

accustomed to meet on Saturdays and rainy days in the attic of the house of one of their number. Here they continued from week to week a play based on their reading of Sunday-school books and other sources which had appealed to them. One of the tables in the attic represented Africa. Here were sand and palm trees made of grass and matches. Dolls were cut out of paper and painted black. In another place were the South Sea Islands, with tattooed savages and canoes; in still another, China. The dolls here were ornately dressed, and tea and rice, obtained from the mothers, lent reality to the scene. London was represented, from which the missionaries, dressed in long black coats, started on their journey in paper ships. Speeches were made, followed by an exercise in rhythmic gymnastics (would it not be?), which represented the long voyage over the very high and swelling waves to the benighted shores of the South Sea Islands. Sermons were delivered to the natives, but to no purpose; the missionaries were duly killed and eaten up. During the development of this play they "bothered the life out" of their parents to find out more about Africa and such places, but never thought of asking their teacher, who at this time was drilling them on the boundaries of the states and their capitals. But this was twenty years ago.

This parable of the attic has many applications, but one is evident here, namely, that concerned with the drawing and painting involved, which, indeed, took most of the time in actual preparation for the production. Now suppose a teacher should suddenly have been transported to this attic, full of ambition to educate the mind and soul. Would he have rapped for order, put the children in

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checkerboard rows, and directed them what to do? Would he not have shown wisdom if he had first made sure of what was actually being done? If his knowledge had been of the right kind, he might have helped this activity in such a way that the children would have welcomed it heartily. Here are the South Sea Islanders. What beautiful designs they used to tattoo on their bodies, and how strikingly they ornamented their canoes! Chinese art, too, is shown in both the color and form of these magnificent robes. If the teacher does not happen to know such things at the moment, why can't he go and learn? Libraries and museums may be near, and the children are already pretty well occupied for the day. This case is not so accidental as it seems. Such things could be done in the schoolroom, and with plenty of notice given to the teacher as to what topics it would be wise to prepare.

Art used in dramatizing doubtless goes further than the primary grades. Even in adult life the connection is strong and vital. A large part of our highest art, our best painting and illustrating, to say nothing of plastic work, scene painting, costuming, and lesser forms, draws sustenance from the stage. In Greek times the drama and sculpture were religious services in their own right, while painting was only accessory. But to-day painting must rise to a direct social value for itself. Like music it must deliver its own message. As an independent form of expression it must appeal immediately to the perceptions of those to whom it is addressed. The painter lends his eyes, and it is quite as important that the borrowers appreciate the favor and know how to use it, as that the eyes of the painter should be trained and developed for this service.

It is in the lower grades, as already indicated, that the present ideas of teaching art succeed the best; that is, so long as children are content to mess around with a little drama in the background of their minds, drawing and painting appeal to them most. In the middle and upper grades, just when they should begin to do something more important, children seem to lose interest in what they are asked to do, and too few of them would continue their work if it were not for the teacher's control. This is a fact which is generally recognized. The cause of it is not so clearly seen. It does not seem likely that this falling off will be wholly remedied by making drawing more dependent on the arts and crafts. There is a real and most important value in art work as an independent culture, and this is one, moreover, which controls all other æsthetic expression appealing to the eye. Teaching ought not to decline upon a lower plane of success, however real, if it is possible to overcome the difficulties of the more arduous task.

Are these difficulties not largely due to an ignoring of the social aspects of art and a failure to find a natural social environment which the child artist of the middle and upper grades can appeal to, and whose admiration and love he can effectively arouse? An adult artist aims to cause something in the minds of those who see his pictures. The same feeling of being a social cause to the fullest extent of his power must also be permitted to the child.

At present the social environment of the child artist of the middle and upper grades is too largely adult. Even when his productions are exhibited to the class it is usually done with the purpose of getting from them the kind of criticism the teacher approves of. The practice is simply a "method" in the teacher's armory. Left to himself, it is doubtful whether the artist would care to exhibit. Since others are producing the same idea, the result is one of competitive effort rather than of individual coöperation and division of labor.

But it is not the school alone that makes the child indifferent to art at this age. Since he is not protected by a natural child environment for whom he can produce, the adult idea of art, as it exists in the world at large, begins to impinge upon him too soon. He suddenly wakes up to the feeling that, judged by adult standards, he is not able to draw. His early attempts look crude and foolish. He adopts the genius theory and excuses himself from all further attempts. The art infant has been prematurely born, and naturally dies. The wrappings and membranes of a child world, that should have protected it and nourished it, have been allowed to become thin, or are even torn off unwittingly by the adult-made course of study and the teacher.

Few fully developed adult artists can look back at the productions of their adolescent years without feeling that, owing to the force of illusion, they have been mercifully preserved. If they had known at the time more of what art ought to be, it would have killed rather than stimulated their artistic growth. Hence it happens that many artists come from the country or from regions where in their early years they heard and saw but little of art. The same is true of races. The naïve beginnings of Greek art would doubtless have withered away if they had been confronted with the present development of, let us say, the art of Japan. Today it is a question whether Japanese art, while giving much to our own, will not find itself arrested by the contact.

Undeveloped races of adults cannot well be protected from other races of adults, but nature has provided otherwise for children. Just as they are protected biologically from sexual strain, and, except where great poverty interferes, from economic strain, so should they be protected from every form of social strain. Such protection permits growth and prepares for the proper sexual, economic, and other social functions of maturity. This does not mean absolute isolation from the adult world. The forces of growth gradually remove the relative isolation of the beginning, but no step is naturally taken until there is inner power sufficient to cope with the external conditions. The natural means for this protection, as well as for its gradual removal, is self-organized interaction and coöperation among the children themselves. The teacher's function should be to further this activity both on its protective and its disruptive side.

When this attitude is taken, and the children's own plans for their artistic productions are allowed to lead, invention and individuality appear at once. On the other hand, just because there are others to please as well as the teacher, the teacher himself is able to give more fearless criticism than when his praise or blame determines everything. The rate of progress is more rapid, and the children, being conscious of a background of social admiration and approval, do not adopt a blasé attitude towards adult art, but stretch out towards it and strive to understand it, in order to use what they can for their own productions. They are being educated in effectiveness as well as in execution.

An example of this kind of work, produced towards the end of the year by a group of third-grade children, may

serve as an illustration. A "Spring Book" group was formed by four or five girls. Each wished to make a book of paintings suggested by the spring, which was just beginning. They decided to confine themselves to flowers, and to paint one on each page. One of these books, which I possess, contains ten flowers painted from specimens that had been collected by the members of the group. They painted together and admired each other's work, and were glad to have it seen by others, but they made no special attempt to interest the rest of the class, who were occupied with other things.

Another illustration from the sixth grade of the Wells School, Boston, in which the children drew pictures for several days in order to get the best arrangement for a series of tableaux which they were preparing, shows some interest in art for its own sake as well as for its service in other aims.

Let us glance now for a moment at the matter which is expressed, — the thought or feeling which is passed from one to the other, — and we shall see that here also the social point of view is amply justified. The two cases given above express a content ordinarily accepted as beautiful, passing from an emphasis in color and form in the one case to action and dramatic quality in the other. Certain children are, without doubt, capable of understanding some features of the beautiful as it is ordinarily understood, but it is often overlooked that most children are still more impressed by the grotesque and the comic. In their natural expressions, however, and apart from adult decadent influences, sometimes exemplified in the Sunday papers, these are as legitimate forms of the beautiful as any other. The grotesque,

especially, as distinguished from the comic, which is simply a more superficial form of the same feeling, is both deep and penetrating. As Ruskin pointed out, the whole of Gothic art originated in the grotesque. The dragon of China and Japan is a motive which, however decorative, always retains its value as a grotesque. If it is flattered so as to lose its touch of the unnatural and weird, it also loses its hold upon the imagination, and we feel that its place would be better filled by a flower or a bird.

The grotesque originated in fear, and offers a means for its radiation and control. An example of the operation of these forces may be found in the quaint carvings decorating the old Gothic cathedrals. When Christianity entered Europe it represented a higher love and reverence than the European nations had previously known. The old gods were, however, only slowly displaced. These had obtained a deep hold on the emotions and the imaginations of the people. Even where genuine convictions were established as to the greater nobility, tenderness, intellectual consistency, and social power of Christianity, the old gods were still to be reckoned with. They had always been gods of fear, although before the advent of the new religion they had also shown their protective qualities. This protection had now been repudiated, profitably on the whole, but not without the possibility of reprisals. As a result, an underground cult of the old gods was still continued. They were turned into fairies, sprites, gnomes, dwarfs, satyrs, devils, powerless under the sign of the cross, or at Christmas time, but still capable of doing a great deal of harm. In many parts of Europe, in Ireland for example, a serious view of these agencies still exists.

Whether from an intellectual plan, or, as is more likely, simply as a result of the logic of the emotions, Christianity showed its wonderful socializing force by taking hold of the more hideous forms and turning them into gargoyles and other grotesques, and making them of service both in the material building of the church and in the spiritual purification of its members. It is to be remembered that these figures are to be found principally, if not always, on the outside of churches. They seem to have been made as hideous as possible, but still subject to law, doing some task, never the most honorable, their faces usually downwards, not forming finials, and finally, as another expression of tame submission, considerably conventionalized in design.

The effect of this upon the beholder is easy to imagine. At first startled with the fearsome figure, the associations representing his imagination of, and half belief in, the old gods thoroughly aroused, the next moment he realizes where he is. The immense pile of the cathedral, representing his new love and reverence, rises powerfully before him. He is saved from his fears, and if they occur again at a distance from the place of sanctity and salvation, he is very likely to remember the experience he has had. He has been provided as in a drama with the reconcilement of a fifth act.

If the fear has been deep, his feeling becomes one of relief and peace, characteristic of the real grotesque. If, however, the fear aroused is somewhat slighter, a sense of comic humor is awakened and he may smile or laugh, especially if he finds himself with companions whose presence both weakens his fears and strengthens his assurance of sympathy. This latter attitude is probably the only one

which men of the present generation are capable of feeling, and even our sense of the comic in these figures is not strong without some realization of the historic past in which they are placed.

The grotesque is, on the whole, an embryonic form of art, appearing in races at the beginning of civilization. It expresses strong and primitive feelings, and sometimes the deepest convictions. It may be executed with the simplest means, and although capable of high technique, is not submerged by the lack of it. It is a combination of similar elements that makes children's drawings also naturally grotesque, although the particular themes dealt with are not identical with those of primitive adults. Unfortunately the usual courses of study made by adults tend to kill out this form of childish expression by insisting on a content of thought and feeling concerned with the beautiful as ordinarily and too narrowly understood.

Some years ago the present writer made an attempt to get back of the usual course of study and see whether children had any fears which they could naturally express by means of art in school. After being started by the teacher, who told what he used to be afraid of, the children were ready enough to describe what troubled them. Doing this to their comrades in broad daylight, with laughter and sympathy, was itself, although a little exciting, an experience which gave courage, confidence, and consolation. As Aristotle said, we make war in order to have peace, and have fear in order to love. Later on, the teacher asked those who remembered things they were afraid of, which could not well be described in words, to draw or paint them. This was done gladly, and the children showed

them to each other, often with great humor and much laughter. The drawings made from the second to the eighth grades represented snakes, ghosts, burning houses, runaways, horses, elephants, bears, murders, pursuits, burglars, dark rooms, falling from cliffs and high buildings, and horrible things which the artist saw but could not name. There was no doubt of the reality of the experience, but the most interesting feature of the experience, but the most interesting feature of the experiment was the vigor of the artistic treatment. Economy of effort was marked throughout. Everything was done with "two dots and a dash," as modern art requires.

A word may be said in conclusion as to the development of art and its social significance in the higher grades and in the life of the ordinary citizen. In order that the individual be trained to the appreciation of the highest adult art, it is of course necessary that he rise beyond the point of view of the grotesque or comic and enter into the understanding and enjoyment of the beautiful as such, or in its finer and more restricted sense. The age at which this begins to be possible is probably not before the beginning of adolescence. There seems to be good reason for believing that art is in reality a radiation of sexual emotion which it serves at once to stimulate, to purify, and to control. If this is so, it is in the upper grades and in the high school that the taste for the characteristically beautiful ought to make its appearance, and it is beyond this period that it ought to produce its greatest effects.

It is quite apparent, even to ordinary observation, that the great symbols of beauty do not appeal to little children. They would rather play in the sea than gaze at it, rather count the stars than wonder at their majesty. Children

miss the tenderness of landscape. They see the dawn, but not its blush. Their blood does not sing with "the color of rain and riot in the woods." The romantic and the passionate as well as the austerely beautiful, the vibration of deep feeling, or the ecstasy of a quiet dream which stills emotion because it rises out of it, finds no response within their souls. The reason of this is obvious. The master passion of love, which gives tone to all these other varieties of feeling, is not yet awakened within them.

Among the first signs of a real appreciation of the beautiful is the special interest that boys and girls begin to take in their personal appearance and adornment. This is quite different from the desire to be merely clean or neat, which may be inculcated at an earlier age or even be quite wanting. A child may despise another who is dirty and be proud of its own superior condition, but not until it approaches puberty does it use its cleanliness or other qualities for the purpose of attracting and capturing the admiration of others of its own age, especially those of the opposite sex. When this time comes, mere neatness or cleanliness is not regarded as a sufficient means of expression. Something much more unique and individual is felt to be necessary - something, indeed, which draws attention to and enhances the physical or psychic perfection of the individual or conceals or disguises what is supposed to be deficient. A bright ribbon or a necktie, an open laugh if the teeth be good, smiles if a dimple shows, rings if the hands are fine, poses, ways of walking, witty remarks, fine phrases, well-toned modulations, and all kinds of actions and stage properties which display or show off personal charms, are in constant use. It is quite evident to any observer that it is not the

opinion or approval of older people which is sought for. The effect that the individual aims at is the admiration of persons about the same age of the opposite sex, and the defeat or outclassing of rivals of his own. This latter motive in the earlier stages may overshadow the primary one, and by arrest of development become a prominent feature throughout life. It is, however, based upon the sexual emotion. As the males of the passerine birds arrive at the nesting places days in advance of the females, and spend their time in singing or other rivalry, so both boys and girls often prefer to separate for the unavowed and partly unconscious purpose of showing off, or practicing and perfecting their powers without the immediate presence of members of the opposite sex. These, however, it is safe to say, are not far from either their thoughts or their feelings.

The result of this courting play, it will readily be seen, is to produce a sharper appreciation of certain rather crude but important and fundamental manifestations of the beautiful. This appreciation is not merely passive, but primarily creative. To decorate one's self properly and to display one's charms and powers is a work of art. Until the person creates for himself, he does not well understand the creation of others. Just as the grotesque is a radiation of childish fear, so this art of personal display is a radiation of love.

It is quite evident that at this stage a higher form of art—landscape, for example—would be wasted on the youth. Not until his longings are more mature does he care for the moonlight night, in which he may wander, lovelorn, or happy with his sweetheart, or in which his thoughts may wander with equal mystery and much the same background

of emotion. The lonely sea, the majestic mountain, the woods and fields are not till later suitable symbols for his feelings; nor do they ever become so until he finds in them an echo of the deepest sentiments of his life. Although at this later stage he may not set down on canvas the record or analysis of his æsthetic feeling, he really creates a work of art, and paints a landscape suffused with emotion in the depths of his soul. Until he does so he can never understand, because he cannot feel the works of art produced by others.

That children may occasionally look at pictures by great masters is no proof of any adequate appreciation. They look at these pictures as they look at anything else: "There are three cows," "Here is a man and he is chopping wood," "That is the sun; it is going down." Some information, perhaps, may be gained, but there is hardly the slightest touch of æsthetic feeling. In this they are quite like a great many grown-up people, and perhaps like some of their teachers. The use of cheap reproductions, with which our primary schools are beginning to be filled, is no indication that art or a feeling for the beautiful is thereby advanced to any considerable extent.

From the seventh grade up, it is, however, quite reasonable to expect that if principles of decoration were taught in a sufficiently concrete manner, and as applied to personal adornment and household stage property, there would be real appreciation on the part of the young. It is equally reasonable to expect that there would be, under these conditions, a real development of their conceptions of art and the beautiful, and one that would lead them to a higher stage, such as is involved in an understanding of painting

and the related graphic and plastic arts. The principles of form and color apply to a hat or a gown as well as to a piece of colored canvas in a gold frame.

The social implications of such a point of departure are quite obvious. First, as concerns the ideas dealt with. A study of the different ways in which human beings living at the present time and in past ages have satisfied their need of adornment would lead to a study of the costumes of different nations and an examination of smaller objects of art, such as rings, brooches, pins, etc., and the artistic processes which have produced them. A study of the fabrics which people use in clothing would be of the greatest social significance. The help of some science or laboratory work would probably be appreciated. How much wool and how much cotton is there in a piece of cloth, is an important question for the purpose of the best adornment, and a knowledge of how to apply a suitable test would have excellent economic results in the control of the supply of inferior goods frequently offered in the market. Such a simple test as boiling in caustic potash is within the means of every one.

Secondly, in working out such ideas, coöperative and productive effort on the part of the students would be easily obtained. As a simple illustration of this I may cite the work of a group in the Girls' English High School, Boston, in a class in literature under Miss Elizabeth M. Richardson. This group made a study of Elizabethan manners and customs to present to the class, and, in order to express part of their ideas, dressed five dolls most charmingly in the costumes of the period. In doing this, they followed Dion Clayton Calthrop's work on the history of

English costume. Although the dressing of the dolls was done under the title of English, it is quite plain that it is also art work, and surely no one will be disappointed to find such work so closely correlated, and capable of service in other fields (1).

The further education in art, which should come after pupils leave the school, is at present conspicuous by its absence. This is particularly true of the arts which appeal to the eye. The art museums attempt in some places to do something for the public, but for the most part effect practically nothing, except for the specialist. The higher stages of art seem to have moved almost entirely outside of the range of the people, who content themselves with characterless photographs of living friends, air-brush crayon portraits of dead ones, cheap representations hung upon the wall and never looked at, to say nothing of the vulgarity and lack of composition of the objects of furniture which encumber and disfigure the ordinary home. The peasant life of Europe may have been bitterly wanting in fundamental necessities of life, but it was not so povertystricken and squalid in matters of taste.

The failure of the sense of the beautiful is already having serious social and economic results. It is at the bottom of a considerable part of our industrial difficulties. Manufacturers supply a demand. But when the demand is undiscriminating, childish, and about as well satisfied with the ugly, vulgar, and merely costly as with the truly beautiful, the supply begins to control the demand, and manufacturers, like glass-bead traders among savages, are able to dictate the situation and twist the market more and more to suit themselves. Trash is sold at high prices, while, quite

often, better goods are overlooked. This reacts upon the laborers themselves. Since the demand is not discriminating, goods can be produced by unintelligent help, who are poorly paid, massed in battalions under the eye of a task-master, and more interested in their wage than in their work.

The only way to check this tendency is to educate the people, in a self-organized and coöperative manner, to produce the beautiful for themselves. This will not only partly supply the market and give interesting and lucrative occupations for dangerously unoccupied hours, but will raise the general standard of taste and improve the production of the country as a whole. If the art museum is to help effectively in this effort, it must be turned into an institution even more thoroughly social than the excellent public libraries of our towns and cities. It must drop its sphinxlike attitude and bring itself down to the actual lives of the people. It must answer their questions as to the beautiful in their homes, the clothing they wear, the houses they would build or rent. It must devote more space to the minor arts, and particularly to the cultivation of those arts like needlework, lacemaking, pottery, carving, etc., which the people can pursue at home. It should provide local exhibitions, kilns for firing pottery, and lectures for explaining the beauties of ancient and modern masterpieces.

Unless some such effort is made, there is danger not only of losing the sense of the beautiful, but of falling behind as a nation in the markets of the world. Success in husbanding and promoting our artistic resources would, on the other hand, lead to a happier as well as to a profounder social life. Many of our moral and religious questions would receive a better answer. Manners and customs

would be more refined, amusements less coarse and shallow. Sanitary and hygienic needs would press more strongly upon us. Art and the sense of the beautiful is by no means a mere luxury, but a necessity for our most effective social and personal development. Like a crown of harmony betokening real command over subordinate powers, the angel of life holds this blessing above our heads, waiting for us to recognize our birthright as a civilized nation and a truly social people.

REFERENCE. 1. Elizabeth M. Richardson, Social Education Quarterly, Vol. II, No. 1.

CHAPTER XII

THE EDUCATION OF THE CONSCIENCE

The education of the conscience means the teaching of practical as distinguished from theoretical ethics. Like other teaching it implies learning on the part of pupils. The learning, in this case at least, must be learning to do. But doing is already started and in full swing before learning is possible. The problem of teaching (and of learning) the best conduct must therefore begin with what is going on habitually or instinctively, and must attempt to develop out of this something better. The individual must learn that he is to be held responsible for his acts, that he must gradually rise above instinctive or impulsive conduct, must study and criticise the effects of what he does, and control his life to the fullest extent that his intelligence will permit. He must feel that either singly or in combination with others he is a cause of what happens.

In many and to some extent in all instances in life we are causes without realizing it at the time. A great part of the tragedy of existence arises from this fact. We do things without knowing or being able to know their full consequences, and yet we feel impelled to stand by these acts, and to assume that because they were ours we are responsible for their outcome. This is really the essence of courage, and life would break down without some such attitude. In fact, if we attempt to eliminate from ourselves

all responsibility for consequences except those which we had fully foreseen, there would be very little of us left. Although it is an assumption, and quite monstrous from a purely intellectual standpoint, yet it is one which all of us who are not morally imbecile, spontaneously and naturally accept. And it is only after we have staked ourselves on the issue that we begin to bolster up our conviction by appeals to reason. We say that we accept this or that responsibility because we were the unwitting cause, whereas we really see and admit our causal action (without much foundation so far as our purely individual life is concerned) because we have already assumed the responsibility. The glory of such conduct does not arise out of the apparent premises. It comes rather from the fact that in the moment of expansion when the individual accepts the action and calls it his own, he is really then a cause, and feels the joy of being so, but, by a kind of mirage, projects the event to some past period which has at least the convenience of being easily objectified. That this is the truth seems plain when we consider that we can never rest in any portion of the past. If my action at a previous time is the cause of what is now happening, what was the cause of that action then? And so on, till, with modern ideas of heredity, we are far beyond the confines of the individual, or even of the human race.

It thus appears that the "imperatives" of which we are conscious are the result of our own selection. They are revealed to us in the clash of actual living. If we reject them, we can always find seemingly satisfactory reasons for doing so. If we admit them, we can also make them appear to be reasonable. In reality these imperatives are

simply guides for experience. We treat them as working hypotheses, which are to be justified by the verifications of facts of conduct of which we regard ourselves as the cause. We make these hypotheses come true by the acts which we perform.

But if we select our duties, we no sooner do so than we feel that all the circumstances of the world are powerless in the face of them. We may sacrifice happiness or life to maintain them. Even if we fail to produce the facts they call for, the original selections still remain, each of them a monarch, without an empire, but not without a crown. Nothing can shake them except a flaw in the title, followed by a further and broader selection of new duties involving still greater assumption of responsibility and a more profound and expansive feeling of causality. Indeed, we are not able to see the flaws in the duties we have already selected, except in the light of the larger duties to which they cede.

It is plain that the child, as he grows to maturity, passes through stages of moral development in which he arrives at a gradually increasing consciousness of the reality of personal causation. At first he is surrounded in the family by stimuli to action which affect him by way of unconscious imitation. A large part of this is without the incitement of words, and is quite like what occurs in the education of any young animal. The chick learns to peck partly through the stimulus of seeing its mother do so. The child runs, puts out its hand, laughs and cries when others are doing the same thing. It is not that he chooses to do these things—he cannot help doing them. The stimulus drives through his organism and sets him going. Later on, words have a

similar effect. By creating a motor image composed of activities already used, by picturing another, or himself regarded as another, as doing certain things, the imitative action follows automatically. At any part in this process, however, the feeling of being a cause may arise. He may observe the effects that are being produced, and may either experience an inward joy as he sees the meaning of his action, or may arrest it as unsatisfactory.

While the first fact about conscience is the feeling of causation, the content and direction of the action and the particular effects aimed at are always the result of social environment, modified by the creative imagination of the individual agent. If we look at conscience functionally or in action, it is experimental, pragmatic, and a question of the sense of individual effectiveness. If we look at it statically, either as the ground or as the imaged aim of the action, it is always a state of society which we have in mind. We are surrounded and controlled by a great cloud of witnesses, actual friends and neighbors, opponents and enemies, past saviors and heroes of the race, the future wife or husband, the unborn child, or the Great Companion, God—a brother-hood and fatherhood and childhood for whose sake and by whose tragic or inspiring example we live and act.

To develop an imaged assembly of persons in an individual is the work of education. For this the first thing that is necessary is actual primary contact with other individuals. It is from this contact as a basis that we build up our images and ideals. But what other individuals? Shall we select them, if possible, so that their manners shall be perfect, their morals irreproachable? Shall we fill the mind with perfect pictures, pure Sir Galahads? Would heaven

be a good place for the purpose of education and development? If moral training were simply a matter of unconscious imitation, there is no doubt that such a plan would be the most efficacious, but when we remember that it is primarily a matter of the feeling of being a cause, it is plain that something more is requisite. Some opportunity, and the greatest opportunity he is capable of using, must be found for the individual to accomplish results in social causation. Sir Galahad, the flawless teacher, or the carefully chosen circle of companions, do not call very poignantly for assistance. And even if we take them as examples, we must find some field to carry these examples into practice. If we are to obtain an imaged assembly of persons that we care for, we must do these persons some service. While part of this service may not be appreciated, or may even be objected to at the time, it is surely reasonable to think that by far the greater bulk of it should be welcomed and honored. If we are to do unto others as we would have them do to us, a return of honor, if not of other service, is as unavoidable as action and reaction in the law of gravitation.

Even if we say that our first business is to reform ourselves, the purpose of making ourselves better is narrow, unethical, and devoid of causal feeling, if we have not also in mind the service that this improvement will be to others. As a matter of practical experience, it is always for some loved person's sake that we hold ourselves together, resist temptation, or scale the heights of heaven. What would they do, or what would they think of us if we fell, is the question which fortifies us.

On the other hand, to work upon ourselves is heartless work, if some one else is not helping us in the effort. If

some one else does not feel an interest in our being better and stronger, does not long to have us so, and does not admire and honor us for the good that is already in us and the service we have already performed, there is little likelihood that we shall ever improve. It is isolation that is hell.

It is thus not the receptive attitude, but the active outstreaming of initiative and leadership, which, as distinguished from its basis in social habit and custom, is the starting point of all personal morality. We give in this sphere before we can get. To give is not only more blessed, but more necessary than to receive. We do first and understand afterwards, and by virtue of the return that comes to us from those we serve. This return of honor, moreover, is a part and measure of the action, whether it be honor received from those above us, from those on a similar level, or from those below us.

The first of these is the easiest to strive for. Humanity is almost instinctively ready to oblige, to serve, and to receive honor from those really felt to be on a higher level. It is more difficult to deserve and receive honor, in the sense of feeling its value, from those on the same level or those below us. But it is at the same time more necessary for democracy and for the school. When those who are looked up to by others receive a service without returning honor and admiration, or give a service and feel too indifferent or unwilling to receive and actually treasure its natural return, they are meanly and proudly attempting a fraud upon human nature. If the good Samaritan cared nothing for the feelings that would be awakened in the traveler to Jericho, but was only serving God, he missed the point.

The feeling of being a cause is weakened and diminished, if it does not extend to the back effects of the causal action upon self as well as to its direct effect upon others. The chain of social causation may be broken at this link as well as at another. As in simple muscular action, the muscular sense itself is as necessary to guide the finger or the limb as its contact with an external object. So in the higher ranges of action, the feeling of honor, the morally kinæsthetic element, reveals itself as necessary to the best adjustment and the most effective conduct. And yet there seems to be a class of moral paralytics whose defect is not so much that they do what is overtly wrong, as that they are insensitive to the joy of honor feeling, and thereby impair their own power of social contact. They attempt austerely and ascetically to insulate themselves, and consequently fail to get the stimulating impression on their own hearts of the true personality of others. Honor becomes in their minds something purely subjective, for which they are indebted to no one. They sometimes say that they act from principle, and not for any return. But the content of this principle is an idea of their own, a fragment of self, which is not simply a working hypothesis, but is regarded, as well as the principle, as a priori and eternal. As George Meredith is never tired of showing in his novels, they love their idea of Love better than they love their lovers.

But it is not only cold egoism which tends to weaken the range and depth of moral causation. Our imaged assembly of persons suffers as much from the refusal to give honor as the inability to receive it. When we compare the image of self with that of another, and find a discrepancy against us, there are two ways of leveling up. We may

admit the conduct or virtue that we have observed. To do this is to enlarge ourselves. Or we may, on the other hand, attempt to reduce the discrepancy by minimizing the value of what we observe. In this case we contract our image of the other, and really diminish our own resources and ourselves. This is envy, and must be distinguished from the just and discriminating criticism which aims to give the truth without flattery on the one hand or depreciation on the other.

Condemnation or blame is another important phase of the psychology of honor. It cannot be said that justifiable blame is useless in society; but it is probably, to a large extent, a reversion to the instincts of the tribe. Here the criminal was made the scapegoat, and the rest of the tribe were educated in solidarity and protected against the future commission of the particular crime by the powerful social awakening of horror which its condemnation in the person of the criminal involved. To reclaim the criminal himself was never a part of the intention.

To-day, with the development of a higher, more individualized social solidarity, the instinct to condemn, in slighter offenses at least, is nearly always accompanied or quickly followed by a feeling of the individual worth of the offender. But we often try to drive the two opposite tendencies in the same direction. We say we blame for the good of the person blamed. Does this ever go farther than words? Is there not always a subtle loading off of our own responsibility? Not until we feel our own human solidarity sufficiently to be able to blame ourselves at the same time and for the same offense, although we may not have committed it in detail, do we win the right to issue blame that is truly

coöperative. Judge not unless we are also judged. It is not so much a question of the mote in the eye of one, and a different kind of beam in that of the other; the beam is quite likely to be a piece of the same stuff as the mote. It may be, however, that even yet some people need the privilege of being allowed to blame others in order to protect and fortify themselves. The fairly general use of the term "force of public opinion," to cover cases of repression rather than of encouragement, would seem to indicate such a need.

The service that is appreciated by others is quite frequently of an apparently insignificant character, but if it is timely, based on a true image of the other person, and delicately adjusted to his actual needs, it may go further in social causation than more heroic efforts. In real causation nothing is stereotyped and nothing occurs again. The situation calling for our activity is always a new one, involving different persons and untried possibilities. Our idea of how to act must therefore always be an hypothesis, and our action an experiment. If a cup of cold water is the thing to-day, it will be something else to-morrow. When we become mere repeaters, we have fallen below the level of free organization and effective causality which is our privilege and joy. We can never adapt our services effectively to another by merely imitating good examples or following excellent prescriptions. Originality and invention, based on a clear image of the actual personality of the other, is a necessity of successful moral conduct.

When we serve another we build up our own conscience because we improve our understanding of the other, and at the same time we increase our own causality by liberating causal forces in another individual. Every moral act either removes hindrances to accomplishment or directly liberates energy in some one else. To enable some other person to feel that he is a greater and more effective cause and can better carry out the aims and purposes that he desires, is a necessary feature of all service. Moral conduct, as already suggested, is concerned not only with the heroic part of life, but with it all. The individuals to be served do not usually need to be heroes, and do not often desire to be; but there is nearly always some point at which they wish to be more effective, although it may be nothing more than to earn a livelihood or to get a better job. Lyman Abbott goes so far as to recommend that the man who is already doing well in life should hand over to others as much work as he can, and search for new labor himself. Let him get some one else to tend the furnace or clear the sidewalk, while he finds something more productive and more difficult to do for himself. Finding suitable work for other people, planning that others may plan, is particularly the teacher's art, and we shall never be a truly moral community until, to this extent, we are all teachers. The care and the culture of men is the background of all the commandments.

How simple the point of application often is may be illustrated by a case drawn from the school. A boy who had been dismissed from six different schools, one after the other, and received into a seventh, was sent by the teacher of his grade to the child-study specialist attached to the school, to see if he could give any advice. The boy was reported as generally troublesome and disobedient, and he was, at fourteen years of age, three years behind his grade.

Physical examinations showed no defect of sight or irregularity of hearing. He was a stout, ruddy, apparently healthy boy. He was, however, several inches below the normal height for his age, his arms were abnormally long and of considerably uneven length, the skull was much larger on the left side than on the right, and the bones of the face were also irregular. These indications led the specialist to inquire through the teacher as to heredity, and it was found that grandfathers on both sides had been epileptics. The father was a hard drinker and very quarrelsome. The boy also, although generally good-humored, was known to be violent when provoked. The specialist observed the boy also in class, and noticed a series of little actions, like clapping out of time when the class was singing, frequently dropping things on the floor, stumbling, etc., which did not seem to be done out of malice, although they were not apologized for when they occurred. It was from accidents of this kind that nearly all the trouble had arisen.

At another interview the specialist found that the boy was very anxious to be a good baseball player, but that he had had little success in the game. The lad said he didn't know what was the matter, but he always seemed to miss the ball just as he thought he was going to catch it, and that he was little better at the bat. At this point an hypothesis came into the mind of the specialist. Said he, "It seems to me that you are like a horse that breaks." (The boy had previously shown a large knowledge of race horses, due to the fact that his father worked with them.) "What do you do with a horse that breaks his trot? Do you whip him?" The boy said: "No—not if it is serious. We generally put him in the stable for a few days and take

care of him." The specialist replied: "I have an idea. I believe we can help you both to get on at baseball and in school. When you go back to your room, take some part of your body, say your right hand, and place it somewhere, — on your desk, in your pocket, or anywhere else. Look at the clock and decide on the length of time you can keep your hand in that position without moving it. But every time you 'break,' put the record down, and bring me the number of times you have succeeded and the number of times you have failed. Of course, if the teacher asks you to do anything during the period, that will be understood to be no break, and meanwhile we will say nothing to the teacher or anybody else about it."

"That's easy," said the boy; "I could do that for half an hour at a time."

"Better not try more than fifteen minutes," said the specialist.

The first day, even at this rate, was filled with failures, and five minutes was tried. This he succeeded with, and after two or three days took ten minutes. He kept increasing the time for about a month, and thought himself that it had a good effect on his steadiness in baseball. At least, he was gaining for some reason. The teacher, who was told nothing of the arrangement until some time later, was delighted with the improvement in the boy's conduct. "Did you give him a talking to?" she asked. On the contrary, as the reader sees, the real secret was coöperative planning between the boy and the specialist.

Conscience, as the origin of the word suggests, is a sort of knowing together. Its law is that of love and honor. It expects others to treat us as they would treat themselves.

It commands us to do to others as we would have them do to us. This, as Henry D. Lloyd expresses it, is the law of social gravitation to which every act is forced to be obedient. Our conduct and our images of conduct tumble to pieces like badly constructed buildings when we ignore it. The law of love in conduct, however, like the law of gravitation in building, does not actually invent the constructions that will survive. It only tests them after they have been invented. The estimate of how others should do unto us varies with every generation and every state of society. Certain savages, for instance, would rather be killed and eaten by their relatives than be buried in the ground and perhaps be dug up afterwards by wild beasts. While the law is constant, the acts governed by the law are as widely opposed as the primitive hut and the New York skyscraper. Images of conduct different from what is customary must therefore be entertained. We cannot strangle them in the cradle. They must be developed, expressed to others, and even acted out to some extent before they can be judged either by other people or by the person who has originated them. If this is not done, the individual remains sterile, and even to make mistakes is not so wasteful nor such a disappointment to our fellow-men as to contribute nothing. Indeed, the man who never makes mistakes is not likely to make anything else.

It is neverthless reasonable that in our experimentation with new and possibly explosive ideas, the greatest care should be used. Discussion — the fullest freedom of speech — is the great invention by which humanity insures the safest exploitation of new ideas. Talking, as well as other forms of mere expression, is, of course, a kind of action, but

it is specially useful because of its economy. Discussion brings to light ideas of other people, and necessarily modifies them by either strengthening or weakening the original idea. "To unpack the heart with words," does not always delay action. It sometimes accumulates and precipitates it. The result depends in each case upon the social environment, and to whom or for whom we unpack.

In ordinary business affairs the value of discussion is regarded by every one as of the greatest moment. A large and successful business firm of some thirty members, known to the present writer, is led by a man of extraordinary business genius. This man will come to the meetings of the firm and talk for two hours, sometimes saying nothing that is not, in the eyes of the others, the most astounding foolishness. But occasionally in the middle of this exhibition of fantasy, he will drop a hint or sketch a brilliant plan that no one else would have been able to think of. When this is seized by the others and carried out in action, it is sometimes worth hundreds of thousands of dollars to the firm. The so-called well-balanced, conservative individual, proud of his "judgment" and relying narrowly upon it, is evidently an inadequate competitor with the man who can find friends who will permit, and perhaps wring from him, the last vagary of fancy.

In the deeper, more personal business of life the situation is the same. Parents and teachers need to offer opportunities for the most complete confession, not so much of faults committed, but of plans and purposes for the future, even if these should be but half formed, imperfect, and fanciful. It is, indeed, those dreams and prospects just beyond our reach which are often the controlling factors

of conduct. It is not sufficient to direct, advise, and impress children and pupils with the right way of acting. It is a mistake to instill constantly. One must not omit the delicate distillation necessary to extract the last aroma of personal revelation.

The provision of such a confessional for the experiments of the future, free as possible from past regrets, and full of the atonement of divine and human fellowship, is a work not only for the school but also for the church and the home. Parents should not only be ordinarily approachable, but in order to be so they should be known to be experimentalists themselves. Children should not feel that they know beforehand the cut-and-dried reaction of father and mother on any question capable of different solutions. The kind of friends, occupations in life, amusements, and many habits have been chosen differently by very worthy people. Parents should realize that their own lives, no matter what their achievements, might have been even more successful than they are, or, at least, successful in a different way. Every life as a whole is largely an experiment, and nature is trying it over again in the new generation. Indeed the new conditions demand change of some sort. Moral insight, like the manna in the wilderness, spoils if it is kept. Many tragedies in home life would possibly be averted if this educational condition were realized. How many mothers who agonize over wayward sons succeeded in drawing from them the secret, nascent thought which later on controlled their lives and led them astray? The boy is bound to experiment; the question is, Shall he experiment alone?

There is no reason why the church should not be a great clearing house for moral and social experimentation. The

Sunday-school lessons, let them be learned never so perfectly and illustrated by cases never so apposite; the moral precepts and directions of the teacher, however forcible and clear; the sermon of the clergyman and the rites of the church, all leave the particular experiment that emerges in the mind of the individual without direct recognition. To say that the application must be left to the individual conscience is only partly true. The individual conscience, in so far as it is educated, is a result of free, intimate contact with other people. Such contact, far from diminishing the feeling of causality, increases it, and both are most fruitful and effective when some actual scheme about to be carried out is the subject of mutual consideration.

So far as a division of labor in this mutual planning with the young can be effected and distributed among the school, the church, the home, and other agencies of society, it is probably clear that the school cannot confine itself to the merely intellectual. As everybody knows, morality as well as intelligence belongs to the whole of life, and the school is forced to realize its responsibility in this direction. The particular moral questions and proposals for living that arise in the school, however, are naturally somewhat different from those which arise anywhere else, and if the school deals effectively with these, it has contributed its share to the education of the conscience.

It is probably clear that the plans for life suitable to the school, if they are to arise from the pupils themselves, or are to become their deep possession, cannot be outlined beforehand by the wisest executive or board of managers. General expectations may be, and doubtless should be, expressed as fully and attractively as possible. But if the

moral action of the individual is to rise to the full causality it longs for, just this leading and controlling feature of moral life is forced to become selective and experimental. It is thus the things that pupils themselves think are suitable to be undertaken as a part of the broadest and most educative school life which will give the only basis for the highest moral development in connection with the school. It is plain that this will vary according to the vitality and the previous conceptions of the pupils, the kind of teachers. the nature of the material resources, the sentiment of home and outside community, or whatever influences may effect the experiences and aspirations of the young. Such activities as those which have already been described in the chapter on self-organized group work will both reveal what the nature of these opportunities will be and test the distance to which they can carry the moral development of those whom they enlist.

Where conditions are favorable and individuals sympathetic, plans of conduct, usually associated with a good home or a good church, may appear in the school; but on the other hand, where the home and the church are already doing their full work, such plans, while showing their influence, would probably not be brought bodily into the school. Life is to be "regarded as a trust held for the benefit of the community," whether in school or church or home. If allowed to act and react upon each other through the self-organized plans of their members, these social agencies would, in all probability, mutually and almost automatically supplement each other's activity. It is only when a priori dogmatism rules that hard-and-fast demands are made that the home and the school must do this, the church

that; and since the church and the home have already won a certain measure of self-direction for their members, it is the school which suffers first, although not necessarily last or most.

The flower and fruit of the moral life is self-organized coöperative production for the service and upbuilding of human beings. Let the opportunity for such work once be blighted or impaired, and the whole subordinate structure of drill, discipline, and obedience becomes but a carcass of tyranny and oppression. The moral life, like the beautiful Spiræa of our meadows, rooted often in marshy soil, builds up, through dark and sunny days, its leafy ladder towards the sky, and finally unfolds its white and spiral flower, full of sweetness, to every breeze. But let the growing bud at the center be cut out at any stage in its growth, and the whole supporting stem withers and dies, as if it knew itself to be but a standard bearer for the germinating flame with which it blossoms on the world.

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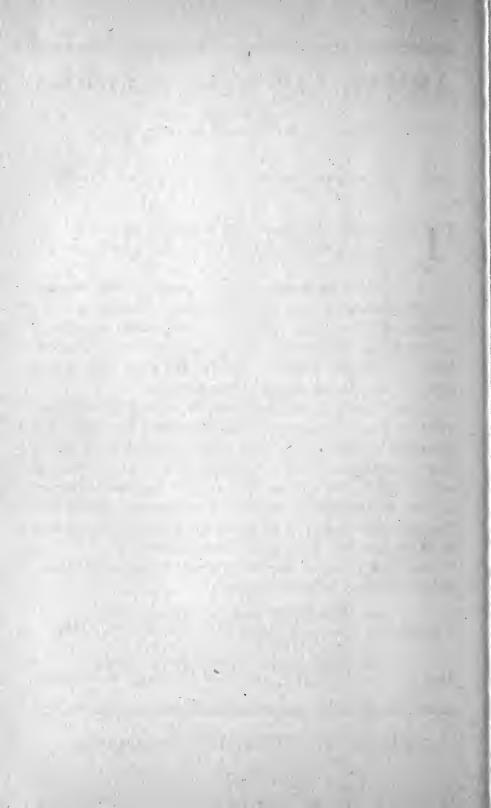
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